



**DELPHOS**

## TO-DAY AND TO-MORROW

*For the Contents of this Series see the end of  
the Book*

# **DELPHOS**

THE FUTURE OF INTERNATIONAL  
LANGUAGE

BY  
E SYLVIA PANKHURST

LONDON  
KEGAN PAUL, TRENCH, TRUBNER & Co , LTD  
NEW YORK E P DUTTON & Co

Made and Printed in Great Britain by  
THE BOWRING PRESS, PLYMOUTH

I

THE LOGICAL NECESSITY  
OF INTERLANGUAGE

HAVING failed to achieve a general means of communication, mankind, in the realm of language, has permitted itself to rest internationally upon the level of the dumb animals

The horses whinney by the road-side, the dogs exchange the courtesies of nose and tail Human mothers of different nationalities know only the dumb language of tear-filled eyes and clasping hands, when they meet by the bedside of an ailing child , and, with a smile and shrug of inept apology, powerful industrialists, famous statesmen, and learned savants confess their inability to exchange with each other the simplest of ideas

Yet in other provinces mankind is knitting the globe to a remarkable unity The interchange of materials between distant countries has led to an interdependence of peoples undreamt of in earlier times World activities and needs are, and will be, ever more and more co-ordinated Sanitation, food, fuel, communications, transport, and education must be regarded from world standpoints

The aeroplane, the telegraph, the telephone, of late wireless telegraphy and photographic telegraphy, and now television, allow us to maintain a rich and constant communication with every part of the globe. It is not too much to prophesy that sensations other than those of hearing and sight will soon be transmitted by similar methods - we shall not only see, but smell, the flowers in the old home-garden, the ozone of the seaside and the latest electric and sunbath-treatment will reach us as readily as the broadcasted concert. By some allied means we may even feel the touch of distant hands.

To-day everyone shares in such developments. The youth of the poorest homes are able to install the wireless. Radio-broadcasting thus becomes a great force, making towards the adoption of an international auxiliary language. The British Broadcasting Company is attempting to standardize the pronunciation of English, but the wireless set carries the people far beyond the confines of their native tongue. The spoken word to-day encircles the globe and can be stored up for future generations. Our children's children will hear the singing of Nellie Melba, and, if they should think worth while, the speeches of this year's statesmen. Yet language-barriers deprive the far-sent word of the universal comprehension given to music.

## NECESSITY OF INTERLANGUAGE 7

Of the influences urging towards Interlanguage, stronger than all is the desire for world-friendship long latent amongst the kindlier and wiser people of all nations, and now quickened to an ardent flame by the agonies of the World-war. With all its faults, the so-called League of Nations is the response of governments to this deep and ever-growing sentiment.

Apart from its intrinsic difficulties of political and economic rivalry, the mechanical business of the League is rendered tedious and costly by lack of a common medium. Correspondence in all languages is received by the secretariat in Geneva. The adoption of two official languages causes the duplication of all official documents. *Headway*, the organ of the League of Nations Union, announced that during 1926 the League's Geneva staff would include 29 translators and interpreters at salaries amounting to £19,800, and, in addition to secretary shorthand typists, sixty-one other typists at salaries amounting to £18,300.

International Congresses of all sorts are similarly impeded. Impromptu translations, by which the business is delayed, provide, at best, only a summarized paraphrase of the speeches, which are often garbled beyond the recognition of their authors, as we can personally testify from experience.

Though prejudice and inertia have deferred the establishment of a world-language, means of international communication have been devised, of necessity, to meet many ~~claim~~ needs. Such include the Morse Code, invented in 1832 (but foreshadowed in method by Bacon's cipher so early as the sixteenth century), the maritime signal code adopted by England and France in 1862 and soon after by all nations, the Gregorian calendar, maps, and figures, the face of the clock, the measurement of time, and the notation of music. Chemistry, botany, and other sciences have their universal signs and nomenclature. The "Formulario de Mathematica" of Peano, 1895-1908, has completed the elimination of language from mathematics. Dewey's decimal classification of books, invented in 1873, meets no linguistic barriers. The civilized world west of Germany has adopted the Roman alphabet, which is always becoming more widely used in printing German. The Angora government has resolved to use it instead of Arabic characters for the Turkish language, and missionaries substitute it for those of the Far Eastern tongues.

In default of a general international auxiliary, composite languages have grown up along frontiers and where, from conquest, commerce, immigration, peoples of different race have been long associated. These com-

## NECESSITY OF INTERLANGUAGE 9

promise-languages include the Benguela of Portuguese East Africa and the Congo, the Lingua Geral of South America, the Pidgin English, French and Russian of the Far East, Hindustani, the interlanguage of India, the Lingua Franca of the Levant, and Chinook, used by Europeans trading with the North American Indians. A similar compromise-jargon was employed by the Indians speaking different languages before the advent of the Europeans, for interlanguage is, in the long run, a human necessity and no mere modern fad.

The War and its settlements stimulated the movement for nationhood amongst small populations. Writers who hitherto would have clothed their ideas in the language of one of the great Empires, now employ the speech of their own small people. Countries that long slumbered in the stagnation of old tradition are now being fired by the spirit of scientific investigation, from India comes Jagadis Chunder Bose with his wonderful researches into plant response and physiology. The speed of scientific progress rushes far ahead of the pace it displayed a generation ago. Those who would keep abreast of the times in any line of investigation cannot wait for translations and find a knowledge, even of three or four languages, inadequate. A ready means of placing theories and discoveries before investigators is required.

Within the frontiers, learning spreads from class to class, ever more widely diffused amongst the people. This is a genuine index of progress, and indicates the possibility of establishing an interlanguage which will spread with the growth of education, and assist in promoting that growth.

## II

### THE BEGINNING OF INTERLANGUAGE

TO the educated world the present international incomprehension is of comparatively recent origin. From the time of the Romans until the seventeenth century Latin was the language of learning, and through it Newton, Kepler, Copernicus, Grotius, Harvey the discoverer of the circulation of the blood, gave their discoveries to the world. Its decline was not due to any failure in the language itself. Though confined to the use of scholars, it was being modified by usage, as all living languages must be, and in harmony with the general trend of language, it was becoming analytical. Remember that classical Latin includes only 202 authors and a number of inscriptions,—whilst medieval Latin comprises many thousands of books.

The fall of Latin came with the reaction against scholasticism and the awaking of the spirit of inquiry, which strives to ascertain fact by experiment and rejects reliance upon tradition. Bacon, a foremost leader in this movement, wrote his greatest scientific works in English, but translated them into Latin, because of its wide currency. Even then he

Made and Printed in Great Britain by  
THE BOWRING PRESS, PLIMOUTH

## THE LOGICAL NECESSITY OF INTERLANGUAGE

HAVING failed to achieve a general means of communication, mankind, in the realm of language, has permitted itself to rest internationally upon the level of the dumb animals

The horses whinney by the road-side, the dogs exchange the courtesies of nose and tail. Human mothers of different nationalities know only the dumb language of tear-filled eyes and clasping hands, when they meet by the bedside of an ailing child, and, with a smile and shrug of inept apology, powerful industrialists, famous statesmen, and learned savants confess their inability to exchange with each other the simplest of ideas.

Yet in other provinces mankind is knitting the globe to a remarkable unity. The interchange of materials between distant countries has led to an interdependence of peoples undreamt of in earlier times. World activities and needs are, and will be, ever more and more co-ordinated. Sanitation, food, fuel, communications, transport, and education must be regarded from world standpoints.

## DELPHOS

The aeroplane, the telegraph, the telephone, of late wireless telegraphy and photographic telegraphy, and now television, allow us to maintain a rich and constant communication with every part of the globe. It is not too much to prophesy that sensations other than those of hearing and sight will soon be transmitted by similar methods. We shall not only see, but smell, the flowers in the old home-garden, the ozone of the seaside and the latest electric and sunbath-treatment will reach us as readily as the broadcasted concert. By some allied means we may even feel the touch of distant hands.

To-day everyone shares in such developments. The youth of the poorest homes are able to install the wireless. Radio-broadcasting thus becomes a great force, making towards the adoption of an international auxiliary language. The British Broadcasting Company is attempting to standardize the pronunciation of English, but the wireless set carries the people far beyond the confines of their native tongue. The spoken word to-day encircles the globe and can be stored up for future generations. Our children's children will hear the singing of Nellie Melba, and, if they should think worth while, the speeches of this year's statesmen. Yet language-barriers deprive the far-sent word of the universal comprehension given to music.

## NECESSITY OF INTERLANGUAGE 7

Of the influences urging towards Interlanguage, stronger than all is the desire for world-friendship long latent amongst the kindlier and wiser people of all nations, and now quickened to an ardent flame by the agonies of the World-war. With all its faults, the so-called League of Nations is the response of governments to this deep and ever-growing sentiment.

Apart from its intrinsic difficulties of political and economic rivalry, the mechanical business of the League is rendered tedious and costly by lack of a common medium. Correspondence in all languages is received by the secretariat in Geneva. The adoption of two official languages causes the duplication of all official documents. *Headway*, the organ of the League of Nations Union, announced that during 1926 the League's Geneva staff would include 29 translators and interpreters at salaries amounting to £19,800, and, in addition to secretary shorthand typists, sixty-one other typists at salaries amounting to £18,300.

International Congresses of all sorts are similarly impeded. Impromptu translations, by which the business is delayed, provide, at best, only a summarized paraphrase of the speeches, which are often garbled beyond the recognition of their authors, as we can personally testify from experience.

Though prejudice and inertia have deferred the establishment of a world-language, means of international communication have been devised, of necessity, to meet many ~~claimant~~ needs. Such include the Morse Code invented in 1832 (but foreshadowed in method by Bacon's cipher so early as the sixteenth century), the maritime signal code adopted by England and France in 1862 and soon after by all nations, the Gregorian calendar, maps, and figures, the face of the clock, the measurement of time, and the notation of music. Chemistry, botany, and other sciences have their universal signs and nomenclature. The "Formulario de Mathematica" of Peano, 1895-1908, has completed the elimination of language from mathematics. Dewey's decimal classification of books, invented in 1873, meets no linguistic barriers. The civilized world west of Germany has adopted the Roman alphabet, which is always becoming more widely used in printing German. The Angora government has resolved to use it instead of Arabic characters for the Turkish language, and missionaries substitute it for those of the Far Eastern tongues.

In default of a general international auxiliary, composite languages have grown up along frontiers and where, from conquest, commerce, immigration, peoples of different race have been long associated. These com-

## NECESSITY OF INTERLANGUAGE 9

promise-languages include the Benguela of Portuguese East Africa and the Congo, the Lingua Geral of South America, the Pidgin English, French and Russian of the Far East, Hindustani, the interlanguage of India, the Lingua Franca of the Levant, and Chinook, used by Europeans trading with the North American Indians. A similar compromise-jargon was employed by the Indians speaking different languages before the advent of the Europeans, for interlanguage is in the long run, a human necessity and no mere modern fad.

The War and its settlements stimulated the movement for nationhood amongst small populations. Writers who hitherto would have clothed their ideas in the language of one of the great Empires, now employ the speech of their own small people. Countries that long slumbered in the stagnation of old tradition are now being fired by the spirit of scientific investigation, from India comes Jagadis Chunder Bose with his wonderful researches into plant response and physiology. The speed of scientific progress rushes far ahead of the pace it displayed a generation ago. Those who would keep abreast of the times in any line of investigation cannot wait for translations and find a knowledge, even of three or four languages, inadequate. A ready means of placing theories and discoveries before investigators is required.

to

## DELPHOS

Within the frontiers, learning spreads from class to class, ever more widely diffused amongst the people. This is a genuine index of progress, and indicates the possibility of establishing an interlanguage which will spread with the growth of education, and assist in promoting that growth.

## II

## THE BEGINNING OF INTERLANGUAGE

TO the educated world the present international incomprehension is of comparatively recent origin. From the time of the Romans until the seventeenth century Latin was the language of learning and through it Newton, Kepler, Copernicus, Grotius, Harvey the discoverer of the circulation of the blood, gave their discoveries to the world. Its decline was not due to any failure in the language itself. Though confined to the use of scholars, it was being modified by usage, as all living languages must be, and in harmony with the general trend of language, it was becoming analytical. Remember that classical Latin includes only 202 authors and a number of inscriptions,—whilst medieval Latin comprises many thousands of books.

The fall of Latin came with the reaction against scholasticism and the awaking of the spirit of inquiry, which strives to ascertain fact by experiment and rejects reliance upon tradition. Bacon, a foremost leader in this movement, wrote his greatest scientific works in English, but translated them into Latin, because of its wide currency. Even then he

indicated the need for a new international medium

Another feature of the time which contributed to the disuse of Latin was the then new enthusiasm for nationality, which burst forth during the ardent days of Elizabeth in a wealth of creative exploits. The breaking away from Roman Catholicism, which claimed superiority to the national Kings and Governments and made Latin its vehicle, had, but a little earlier, shaken the fabric of European society to its foundations. Indeed, it was in the Church that the first blow at Latin was delivered. The result was a glorious enrichment of the national languages, which were transcended by their use as vehicles for the most splendid thoughts of the day. Ceasing to be a medium for constructive ideas, Latin became crystallized, like Irish or any other language, left, as it were, in cold storage.

In 1629 Descartes, "the Father of Modern Philosophy", wrote to his friend Mersenne, propounding the theory of a universal language, so easy that

"It will not be a marvel that uneducated people should learn in less than six hours to compose with the aid of a dictionary."

"I believe that this language is possible, and that one could discover the science on which it depends, by means of which the

peasants could better judge the truth of things than do the philosophers at the present time "

The creation of such a medium was the subject of earnest speculation by many of those powerful minds whose efforts laid the foundations of modern science Vieta, Thomas Harriot, Oughtred, and Descartes had collected and extended the mathematical symbols William Oughtred's *Key to Mathematics* first popularized the use of decimals in this country

" When I first fell from that verbose way of tradition of the mathematics used by the ancients and of late by almost all into the symbolic way I was presently greatly taken by it And I was put upon an earnest desire that the same course might be taken in other things "

Thus wrote Seth Ward,<sup>1</sup> Bishop of Salisbury, on reading Oughtred's work Ward was an enthusiast for symbolism in language and for the project of his learned colleague John Wilkins, Bishop of Chester, Warden of Wadham College, Oxford, Master of Trinity College, Cambridge, and one of the founders of the Royal Society Wilkins defended the Copernican Theory and declared that people must not go to theological works for scientific

<sup>1</sup> Bishop Ward, *Vindiciae Academiarum*, 4to, Oxford, 1654

argument He discussed the possibility of visiting the moon in a flying machine His *Mercury, or the Swift and Secret Messenger* is a cryptographic writing and his language scheme, called an *Essay towards a Real Character and a Philosophical Language* (1668) was published by the Royal Society

In 1661 George Dalgarno published his *Ars signorum*, which was submitted by Charles II to four eminent persons, on whose advice the author received a letter of royal commendation He also invented a method of teaching the deaf-and-dumb, and an alphabet of manual signs These, with his language, were reprinted by the Maitland Society in 1834 Amongst other early schemes were those of Herman Hugo, 1617, Francis Lodowych, 1646, who used symbolic signs between five lines, as in music, and G J Vossius, one of the most learned men of his time

Already in 1650 Sir Thomas Urquhart, the English translator of Rabelais, had written a humorous parody of universal language—a sure sign that the subject was what is called “in the air” Since that time there have probably been thousands of attempts Upwards of 300 examples are still in existence

Pascal (1623–1662) advocated the universal language, and Leibniz (1646–1716) occupied himself with the idea from the age of eighteen

## BEGINNING OF INTERLANGUAGE 15

to the end of his life. He desired the creation of a language which should be an instrument of reason. The words must embody the definition of ideas and reveal to the eyes the verities relative to those ideas, so that they might be deduced by algebraic transformation. He argued that all complex ideas are the product of simple ideas, as is the case with figures. If the letters of the alphabet were made synonymous, on the one hand with figures, on the other hand with ideas, the composition of an idea and its decomposition into its simple elements could be accomplished. The numbers 1 to 9 might be made to indicate the nine first consonants, the vowels should be represented by the numbers ten, a hundred, a thousand, ten thousand, and a hundred thousand respectively. In order to create his vocabulary of words which would hold a mirror up to knowledge, he proposed to analyse all human ideas and reduce them to simple elements. To devise a logical grammar, he decided to work out his theories on the fabric of an existing language—Latin. The analysis of ideas was never realized. His keen analysis of grammar was the great linguistic contribution of Leibniz. Determined to abolish all non-essentials, he declared that all verbs required but one declension, and that it is useless for them to indicate either person or number, as

this is done by the subject Artificial gender he discarded Nouns need not indicate number, as this can be done by a preceding article or adjective Adjectives require no concordance, prepositions should show case, conjunctions mood There is no difference between adverbs and adjectives, the adverb being merely the adjective of the verb , and not much between the adjective and the noun, the noun being merely an adjective joined to the idea of a thing, or a state of being The verb, moreover, is often a noun or adjective accompanying the verb *to be*, which he held to be the only essential verb In these ideas Leibniz anticipated the most drastic analytical grammarians of to-day

As Latin fell in the revolt against the international control of the Papacy, so will the international language ride forward to world-usage on the flood-tide of internationalism, now rising against the wars the national governments have made That a common auxiliary language must accompany the world-fraternity of peoples was recognized during the French Revolution Citizen Delormel presented a *Projet d'une Langue Universelle* to the National Convention of 1795, urging that men and peoples should be met by the gentle guidance of fraternity Voltaire, de Brosses, President of the Burgundy Parliament, and Condorcet, author of

## BEGINNING OF INTERLANGUAGE 17

the *Progres de l'Esprit Humain*, were advocates of universal language Volney (1757–1820), himself the author of works on the philosophical study of language and the application of the European alphabet to the Asiatic tongues, established, through the Institute of France, a prize to encourage research into international grammar.

The same idea swayed English idealists of the period Francis Horner, sometime Member of Parliament for St Ives, wrote in 1799,

“Lord Webb Seymour has come to me with a plan which his brother the Duke has for some time been attending to, of forming a philological society with a view to the invention of a real character<sup>1</sup> Marsden, Leyton, Boucher, and other philologists have been spoken to The project is a grand one”

The learned Scott, Lord Monboddo (James Burnett, 1714–1799), who was likened to Dr Johnson and whose pre-Darwin contention that man is a civilized species of monkey was ridiculed in his day, was also a prophet of Interlanguage<sup>2</sup>

Nietzsche (1844–1900) in his *Menschliches*

<sup>1</sup> Real character was accepted at the time as denoting the universal language of symbols

<sup>2</sup> *Dissertation on the Origin and Progress of Language*, Edinburgh, 1774

*Allzumenschliches*, made a double prophecy

"In some far off future there will be a new language, used at first as a language of commerce, then for all, as surely as some time or other there will be aviation. Why else should philologists have studied the laws of language for a whole century, and have estimated the necessary, the valuable, and the successful portion of each separate language?"

Max Muller, that great student of comparative philology, ardently endorsed the international language idea. Lecturing before the Royal Institution of Great Britain in 1863, he made the following very important pronouncement

"To people acquainted with a real language, the invention of an artificial language is by no means an impossibility, nay, such a language might be more perfect, more regular, more easy to learn than any of the spoken tongues of man"

Dr Henry Sweet, pre-eminent in the study of English phonetics and comparative philology, contributed essays on international language to the *Encyclopædia Britannica*. He urged that the inconvenience of linguistic diversities had been felt since the dawn of civilization, and that the need for an international medium had now become urgent. He rejected all the national languages as too

## BEGINNING OF INTERLANGUAGE 19

difficult, pointing out that they are only in part rational and contain multitudes of irregularities. He charged the makers of artificial languages with having copied the worst faults of the national tongues.

### III

#### THE *A PRIORI* LANGUAGES

THE artificial language-projects may be divided into two categories. The *a priori*, or purely invented, and the *a posteriori*, which claims to be based on existing language. This classification cannot be exact. Since all human expression is the result of received impressions, those who have desired to invent an altogether new language have not entirely succeeded in ridding themselves of precedent. On the other hand, the early attempts at a *posteriori* language were largely *a priori*, their authors lacking the knowledge and industry essential to the building of a true *a posteriori* language.

Amongst the *a priori* languages may be classed the systems of Pasigraphy, or universal writing. In Pasigraphy each word is given an equivalent sign, generally a number, in each language. Thus if 2 is the number internationally given to *bread*, it will be intelligible to all. The system is already applied in chemistry, the maritime signal code, and for other practical purposes. In dealing with languages there is the essential difficulty that they are not all

## THE *A PRIORI* LANGUAGES 21

constructed in the same manner, it would be difficult to apply the same numeration to idiomatic French and to idiomatic English. Early attempts at Pasigraphy were those of Hugo in 1617 and Kircher in 1655.

The earlier *a priori* languages were mainly philosophical, aiming, as we have seen, at creating an alphabet of human thought, and expressing more by symbolism than could be conveyed in the same compass by words.

Dalgarno, who wrote in Latin with simplified spelling, gave a common form to the name of individuals of the same genus, varying only the last letter to denote the different species, thus

Nηka = elephant    Nηkn = horse    Nηke  
= donkey    Nηko = mule

Bishop Wilkins placed ideas in forty classes, each denoted by a sign within horizontal lines —^- The classes he divided into "differences", denoted by signs on the left, and the differences into species, denoted by signs on the right. The various pronouns were indicated, each by groups of dots, *the past*, *the present*, and *the future* by 1, 2, and 3, *can* by 6, *may* by δ.

Delormel classified ideas upon a decimal basis, having ten vowels in his alphabet. The Abbot Bonifacio Sotos Ochando, who was professor of Madrid University and held several other posts of learning, in 1845

denoted inorganic objects by *ab*, simple objects or elements by *aba*, matter or bodies in general by *abe*, dimensions by *abi*. From *aba* were derived *ababa* = *oxygen*, *ababe* = *hydrogen*, *ababi* = *nitrogen*. In the language of Letellier (1850) *a* = *animal*, *ab* = *mammal*, *abo* = *carnivorous*, *aboj* = *feline*, *aboje* = *cat*, *abode* = *dog*, *abiv* = *horse*.

The primary difficulty facing all attempts to devise a language of classification is that in the world of ideas which language may be called on to express we are not dealing with a few simple elements, but with a fabric of infinite complexity. Moreover, ideas, and views as to their classification, are constantly changing. As Dr Donnan, in an address to the Royal Institution, pointed out, the Aristotelian classification of the elements into earth, air, fire, and water has long been discarded, and the chemical elements accepted at the beginning of the present century have given place to theories of electrons, protons, and neutrons, which may presently be superceded in their turn. In a language of classification a slight vocalic modification might produce, not a mere mispronunciation, but the transference of a word to another class. The relentless progress of science might render great literature unintelligible.

Despite such objections, there can be no doubt that all natural languages grew up, in

part at least, as languages of classification. Before gender was developed primitive peoples classified their names for things according to totemistic ideas. In one of the African languages the substantives are still divided into nine classes. In most languages such classes have been gradually worn down till they have come to indicate only the three genders. The attribution of the masculine or feminine gender to words denoting inanimate objects, which occurs in many languages, is a survival of totemistic classification.

J. A. Decourdemanche, in his *Grammaire de Tchingane*,<sup>1</sup> argues that all language was originally formed from the joining into words of monosyllables, and even of simple letters, each of which had a distinct value in the meaning of the word. He presents an able case for the belief that, whatever its origin, Gipsy speech in its present state is a practical example of a language formed according to the principles attempted in vain by the more sophisticated seekers after the universal philosophical language.

Symbolism has established itself in the representation of chemistry and mathematics, and may triumph also in new directions. Whilst it has many attractive features, it must lack, until it has grown old in use, the

<sup>1</sup> Paul Geuthner, Paris, 1908

historic and social influences which belong to *a posteriori* language. It would seem more possible to adapt a system of symbols to writing than to speech, and for conveying practical and scientific ideas than for literature and the expression of emotion.

In spite of its difficulties, the philosophical language of classification and symbolism has proved a constant subject of attraction. New schemes for it still appear, and even so late a writer as Dr Henry Sweet admitted a preference for such a medium.

In 1885 a committee appointed by the French Société Internationale de Linguistique reported that the universal language must be philosophical and must have nothing in common with any natural tongue.

The language of classification which received the widest measure of popularity was Solresol, invented in 1817 by François Sudre, a French music-master. Its vocabulary was formed from the notes of the scale *do, re, mi, fa, sol, la, si*. By transferring the accent from one syllable to another, verbs, adverbs, adjectives, and nouns, personal and impersonal, were formed from a single stem. A Solresol message could be given in music, coloured lights, or flags. It could be used for communicating with ships at sea or for the finger language of the blind. It was favourably reported on by the French Institute on

four occasions, received a prize of ten thousand francs at the Paris Exhibition of 1855 and a medal at the London Exhibition of 1862, and was endorsed by Victor Hugo. Its author was invited to expound his method before the Emperor Napoleon III.

The Langue Blue of the Parisian, Leon Bollack, emerged in 1899. His method was to draw up a list of all the pronounceable monosyllables he could discover containing not more than five letters. It happened that amongst the number were Pnabs, Kvaf, Krelv, Mrolm, and Sparf. Langue Blue became remarkably popular. How far it was from likeness to any existing language may be gathered from its rendering of the opening words of the Lord's Prayer *Nea per, eu ra ser in silu*.

## IV

THE *A POSTERIORI* LANGUAGES

THE *a posteriori* languages began later than the *a priori*, though some date from an early period. The first was probably Carpophorophili, based on Latin and published by an unknown author in Leipzig in 1734. A remarkable early sketch was the Langue Nouvelle of Fauguet, Treasurer of the Bureau des Finances, Chalons-sur-Marnes, who proposed it for international use by the academies of learning. It appeared in the famous *Encyclopédie* of the eighteenth century by Diderot and d'Alembert. It had no article, no gender, no concordance of adjectives, its substantives formed their plural in *S*, and were otherwise invariable, case being shown by prepositions. The verbs had but one conjugation, which was exceedingly simple. Person and number were not indicated by the verb. The vocabulary was not worked out, indeed, the philological research requisite to the construction of a true *a posteriori* vocabulary had not yet been accomplished, but the scheme was far in advance of many later attempts.

Communicationssprache, by J. Schipfer

(Wiesbaden), 1839, was an attempt to simplify French Pantos-dimou-glossa, by Lucien de Rudelle (France, 1858) had a vocabulary based on Greek, Latin and the neo-Latin languages Universal-sprache by Von Pirro (Paris, 1868), an important effort, was based on Latin, with widely known words from English, Italian, and Spanish Its grammar was simple, and it was fairly intelligible to many nationalities at first sight "*Men senior, I sende evos un gramatik, e un verb-bibel de un nuov glot nomed universalglot*"

#### VOLAPUK

In 1879 Johann Martin Schleyer, a Roman Catholic priest, conceived the idea of a universal language of peace and brotherhood In 1880 he completed his project, and dedicated it to God His effort was, indeed, appropriate to the times The German Empire, having fought its way to existence under the aggressive policy of the Prussian Kings, inaugurated its rule by imposing rapacious peace-terms upon France in 1871, and then set itself to the methodical and ruthless creation of an imperial army and navy The war of Turkey and Britain against Russia, then raging, was an awful reminder that the Great Powers might be drawn into conflict at any moment

Schleyer called his new language Volapuk,

meaning vocabulary world-speech. It was a cumbrous monstrosity, but its success was extraordinary. It far outstripped in popularity all other projects. In 1886 Dr Auguste Kerchhoffs, Professor of Languages at the Paris School of Commercial Studies, founded an Association for the promotion of Volapuk, with a committee distinguished in literature, science, industry, and commerce, which held fourteen public Volapuk classes simultaneously in Paris. Other bodies followed suit, even the *Grands Magazins du Printemps*<sup>1</sup>. In Italy the Minister of Public Instruction authorized free classes at Turin and Reggio Emilia. By 1889, 283 Volapuk Societies had been formed, including many in the United States, in Sydney, Melbourne, and Capetown, 1,600 people had qualified for the Volapuk diploma, there were a million Volapukists, 316 text-books in twenty-five languages, and twenty-five Volapuk journals, seven printed wholly in that language. In 1889 the third Congress of Volapukists met in Paris, and the speeches were delivered in Volapuk.

Two years earlier the American Philosophical Society, founded by Franklin in 1743, had proposed an international conference in London or Paris, to consider a world auxiliary language. Remarkable to relate, the London Philological Society had

rejected the invitation of the American body, on the grounds firstly, that there existed no vocabulary common to the Aryan languages, secondly, and more remarkable still, that Volapuk was already established in all countries and that it was now too late to improve it<sup>1</sup>

In spite of such dicta many enthusiasts were finding the project of Schleyer too cumbrous and difficult. It has been said that Volapuk was destroyed by ill-judged attempts to improve it. Actually, it was incapable of improvement. A candid analysis revealed little, either in grammar or vocabulary, worthy of preservation. Its death-blow was struck at its second Congress in 1887, by the formation of an Academy to give scholarly advice upon its development. As conscientious people, the Academicians could not fail to suggest alterations, but Schleyer refused amendment. The third and last Congress supported the Academy in its reform proposals. Eventually, in 1890, Schleyer formed another Academy, but his language was already dead.

Schleyer and his language had served their turn in creating a widespread interlanguage movement. The original Volapuk Academy passed on to unfettered study of the interlanguage problem from the standpoint of etymology.

## ESPERANTO

Before considering the outcome of those labours, we must turn aside to notice a claimant star which appeared in the inter-language firmament in 1887. This was Esperanto, the creation of an ardent enthusiast and most capable organizer, Dr Louis Lazarus Zamenhof, who, in 1887, published his scheme under the pseudonym "Doktoro Esperanto", in other words "Dr Hopeful". The name, understood in all European tongues, became attached to the language and helped to make it popular.

Esperanto began to advance at the death of Volapuk. Its first small periodical, *La Esperantisto*, was founded at Nuremberg in 1887, but it was not until 1902 that Joseph Rhodes gathered the first English group at Keighly. About 1896 the language began to make progress in France. Nine years later the French Government awarded the membership of the Legion of Honour to Zamenhof, to celebrate the first of the great international Esperanto conferences, which, except in the War-period, have followed annually and have attracted up to 4,000 delegates. By 1926 the Universal Esperanto Association laid claim to the support of 10,000 subscribers, to 12,000 delegates in 60 countries, to national associations in 32 countries, and to many societies of railway

and postal workers, policemen, blind people, youths, Socialists, Quakers, Roman Catholics, and so on Esperanto talks were being broadcasted weekly from 30 stations in 13 countries, and the language was used for broadcasting news from the Geneva radio-station. The Universal Telegraphic Union accorded it official recognition as a "plain language" for transmission in 1925. The Union of Russian Soviet Republics had issued stamps and postcards with inscriptions printed in it. The Chambers of Commerce of Paris, New York, Washington, and Los Angelos taught it in their commercial schools. The London Chamber of Commerce granted diplomas for it. The Spanish Government made Zamenhof a Commander of the Order of Isabella in 1909, and issued official invitations to attend the Universal Esperanto Congress in Barcelona. The Bulgarian Government and the French Parliament have voted subsidies. Esperanto is used for advertising purposes by most of the trade-fairs of Europe, and by the Governments of some small nations. Some countries encourage its use by policemen and railway and tram employees. The International Labour Office of the League of Nations publishes a monthly circular in it. In 1922 some primary and secondary schools in 320 towns in 17 countries held classes in Esperanto, and

evening classes were held in 1,200 towns in 39 countries. The British Board of Education permitted its teaching in certain schools. In April, 1922, it was taught in eleven English primary schools to 881 pupils, in two secondary schools to 43 children, in one private school to 40 pupils, in ten evening schools to 269 pupils, in Scotland to 90 pupils in two primary schools, and to 89 pupils in two secondary schools. Though the teaching by public authorities reached but a tiny proportion of the populace, even this had been obtained only by persistent lobbying.

The world congress of International Associations in September, 1920, passed a resolution recommending adherence to the important Esperanto movement, "deferring all improvements until the language had been officially adopted by the governments."

Much of the support accorded to Esperanto is undoubtedly prompted by desire for a medium of international understanding, without regard to its particular form. Esperanto is simply "*the international language*" to most of its enthusiasts, yet to the devotees of Volapuk, it seemed that the language of Schleyer had been builded upon a rock.

At the first Assembly of the League of Nations Senator Lafontaine of Belgium moved a resolution welcoming the teaching of Esperanto in the schools of some League

members, and instructing the Secretariat to 'prepare a Report on the results obtained. The resolution expressly asked for information regarding Esperanto teaching, not for inquiry into the merits of the various artificial languages.

The Esperanto organization displayed, in providing material for the Report, that great efficiency which is habitual to it, and which it had also employed in securing the passage of the League resolution itself. An Esperanto conference of Educationists was called in Geneva, at the headquarters of the League of Nations. The delegates included representatives of sixteen governments, and were welcomed by Sir Eric Drummond, Secretary General of the League of Nations. The Report of the League Secretariat was highly favourable, but the third Assembly referred the question to its Commission for Intellectual Co-operation. The Commission called for a further Report, which was presented by G de Reynold<sup>1</sup> on July 31st, 1923. This report was hostile to Esperanto, declaring that from the educational standpoint its barbarity and lack of precision would tend to destroy in pupils the sense of the meaning and beauty of words, and that its employment would be "at once an effect and a cause of

<sup>1</sup> Published in the *Revue de Genève*, May and June, 1925.

"intellectual decadence", and would be so regarded in future times. In September, 1922, M de Rio Branco, Brazilian Minister at Berne, and a member of the League of Nations Assembly also published a criticism hostile to Esperanto.

#### IDO

The Paris Exhibition of 1900 was a meeting-ground for people of advanced ideas and international sympathies from all countries. A French professor of mathematics, named Leau, rose to the practical possibilities of the hour, by gathering a group of scientists to form a "Delegation for the Adoption of an Auxiliary Language", which was to secure the choice of an interlanguage by the newly created International Association of Academies. Three hundred and thirty-one delegates of learned societies and 1,200 individual academicians were enlisted, but in 1907 the Association of Academies declared itself incompetent to deal with the matter. The Delegation, therefore, resolved to make itself the adjudicating body, and offered to recommend Esperanto provided it could be modified in certain directions. Messrs Couturat and Leau, Treasurer and Secretary of the Delegation, Professors Jespersen of Copenhagen, Ostwald of Leipzig, Baudouin de Courtenay of St Petersburg, the Marquis

de Beaufront, and others were appointed to act with the Esperantist Linguistic Committee, but the Esperantist Committee refused even to discuss the matter. The Delegation then adopted a modification of Esperanto, called Ido,<sup>1</sup> the Esperanto word for *descendent*. By this title it frankly confessed itself a modified Esperanto. The two versions are closely allied. Each has its body of supporters, but the Esperantists are by far the larger group. Ido claims centres in 21 countries.

In 1894 Dr Zamenhof had himself proposed modifications of Esperanto. These he submitted to the readers of the small magazine *Esperanto*, but, only a few votes being recorded on either side, he decided to maintain the language as first published. Since that time the Esperantists have resisted alterations.

Variants of Esperanto include Antido, Lingvo Kosmopolita, Esperantido, and Nov-Esperanto by Dr René de Saussure of Switzerland, for many years a member of the Esperantist Academy, who works in harmony with that body. Dr Max Talmey, in the United States, has produced a variant of Ido, called Ilo, which stands for the initial letters of International Language, plus *o*, the

<sup>1</sup> Originally based on a project submitted by the Marquis de Beaufront

inevitable Ido-Esperanto termination of the substantive Ilo, it appears, was the name given to Ido during the first two years of its existence

#### IDIOM NEUTRAL AND OTHERS

Whilst Esperanto was on the threshold of its career, the perfect language was still being sought by earnest students, who more and more came to look for it amongst the elements of the natural European languages. In this country Mr George J Henderson published through Trübner in 1889, an attempt to simplify Latin called Lingua, and followed this with Langue Facile, Latinesce, and Anglo-Franca, a rather grotesque amalgam of French and English. Amongst those who preceded him were the Germans, E Lauda and J Stempf, whose attempts were based on Latin, and Boltz, who tried to simplify Greek. In 1890 Dr Rosa, of Turin, published two projects for simplified Latin.

Julius Lott, the constructor of the Vienna railways, an old propagandist of Volapük, and Dr Albert Liptay, medical officer to the naval commission of Chili stationed in France, both endeavoured to inaugurate a more scientific research into the international elements of language. Lott published Mundolingue in 1889, and wrote in it words which are comprehensible to us all and

reveal a great progress in internationality  
“ Le possibilità de un universal lingue  
pro le civilisat nations ne esse dubitabil,  
nam noi ha tot elements pro un tal lingue  
in nostre lingues, sciences, etc ”

Liptay (*Lengua Católica*, 1891) insisted that the international language was not to be invented, but discovered amid existing language. He declared the creation of a language beyond the power of an individual, and proposed general principles, to be submitted to the world of savants, in the form of a plebiscite, open to all interested. The efforts of Lott and Liptay mark a distinct advance in the Interlanguage movement.

In 1893 Voldemar Rosenberger, a Russian engineer, was elected director of the old Volapuk Academy. He laid before it proposals for a new language, including three thousand international words. Thereafter a language called Idiom Neutral, mainly the creation of Rosenberger, was built up by the Academy, and officially adopted by it in 1898. The vocabulary was selected on the principle of greatest internationality. Many of the chosen words were international up to seven languages. Only in 1902, after nearly ten years' work, during which at least some thirty new projects had appeared from other sources, did the Academy authorize the publication of its language. It was more

scientifically international than anything that had gone before, and its grammar contained several logical simplifications Yet it had many faults, which resulted in the distortion of carefully selected international words

#### INTERLINGUA

"Interlingua is the standard of the insurrection against the routine of red tape and the tyranny of the ancient grammarian", thus wrote Kerchoffs, the first director of the Volapuk Academy, in 1886 Giuseppe Peano, the distinguished mathematician of Turin, was presently to translate those words into a language scheme, and to adopt Interlingua as its title Professor Peano is one of the greatest authorities on the logical basis of mathematics and on symbolic logic His ideographic system has reduced logic to algebraic formulae, which dispense with language By similar methods he has created a language which is intelligible without study to all who know Latin, and almost without study to those who know one European language, although ignorant of Latin He writes

*"Qui stude Interlingua stude etymologia  
et valore exacto de vocabulos in suo lingua"*  
The English of that is

"Who studies Intelingua studies the

etymology and exact meaning of the words  
in his own language"

Peano's mathematical researches have necessitated a wide international correspondence. Already in the eighteen-nineties he was corresponding with his fellow mathematicians of other nationalities in Interlingua, then called "Latino sine flexione". For the study of Chinese mathematics he induced his friend and one-time pupil, Giovanni Vacca, Professor of Mathematics in Genoa, to learn Chinese.

Going later to Germany to study unpublished manuscripts of Leibniz on the infinitesimal calculus, Professor Vacca observed certain pages devoted to interlanguage. He saw that his friend was following on the same lines. This news encouraged Peano to continue his system. Professor Vacca introduced the manuscripts to Professor Louis Couturat,<sup>1</sup> of the Ido delegation, who investigated them, with the aid of the French Government, and arranged for their publication. On January 3rd, 1904, Professor Peano read a paper<sup>2</sup> before the Academia delle Scienze di Torino, which began in

<sup>1</sup> *La Logique de Leibniz, Opuscules et fragments inédits de Leibniz*, Paris, Alcan, with L. Leau, *Histoire de la Langue Universelle*, Hachette, Paris.

<sup>2</sup> Published in the minutes of the Turin Academy of Sciences.

classical Latin and ended in Interlingua. He there showed, according to the reasoning of Leibniz supported by arguments of his own, that declension, formal gender, and conjugation can be dispensed with. As he discussed each simplification, he embodied it in his text, which thus gradually passed into Interlingua.

Originating in the desire of scientists to overcome lingual barriers for practical scientific purposes, Interlingua, from its inception, became a vehicle of original thought amongst people too much occupied with constructive work to engage in propaganda. The fifth edition of Peano's important *Formulario Mathematico*, 1908, was published in Interlingua. The international review of mathematics edited by him has appeared in it since 1903. Fanti, a member of the Academia, in 1925 used it for a work on the principles of radio-telegraphy and telephony. Such scientific publications as the *Acta Astronomica* of the Cracow Observatory, the *Bullettino de Mathematica* of Florence, and the Russian *Ruch Filozoficzny* already make constant or occasional use of Interlingua. *Graphicus*, the principal organ of the Italian printing trade, has a regular technical article in Interlingua.

Interlingua marked a new stage in the interlanguage movement, because it was the

first artificial language to be constructed, not according to individual choice but upon definite scientific principles

In 1908 the old Volapuk Academy discarded its later adoption, Rosenberger's Idiom Neutral, and took Interlingua as its official medium, at the same time appointing Professor Peano its director. The Academy is now the "Academia pro Interlingua". It continues studying the interlanguage problem, in the spirit of impartial inquiry. All who are interested in the interlanguage problem may join it and contribute to the organ of the Academy in whatever artificial language they may prefer.

#### OTHER ACTIVITIES

Several more recent languages have arisen, which share many of the neo-Latin characteristics of Interlingua, but stand midway between it and Esperanto. These include Romanal, Occidental, and Medial Europen, Pan Roman, later called Universal, which appeared in 1903, may be placed in a similar class.

In 1911 a society for the creation of an International Language Bureau was formed at Berne. In 1920 a committee of Esperantists, Idists, and others laid before the League of Nations a petition, officially transmitted

by the Swedish Government, urging that a language, to be taught in all schools throughout the world, should be adopted at an international convention

In 1918 the British Government appointed a Parliamentary Committee on modern language, in view of post-War trading and diplomatic conditions. This Committee devoted a chapter to artificial language, and recommended that a Commission should be set up to study the question.

In 1919 the International Research Council created a Committee to investigate the problem. The Chairmanship was given to Dr F G Cottrell, of the American Research Council, and its headquarters were established in Washington, D C. Co-operating committees were formed in several countries, one of them being set up by the British Association in 1919, with Mr W B Hardy, Secretary of the Royal Society, and Dr E A Tripp, as Chairman and Secretary. This committee reported that neither Latin nor any existing national language could supply the need for an international auxiliary, which could be met, it considered, either by Esperanto or by Ido. Without examining the more modern interlanguage projects, the committee finally agreed to recommend Esperanto. The decision was made before the appearance of de Reynold's hostile report to the League of

*A POSTERIORI LANGUAGES* 43

Nations Commission for Intellectual Co-operation

In the United States an International Auxiliary Language Association is at work. Its Treasurer is Mr Dave H Morris and its Secretary Dr Shenton, of Columbia University. This organization aims at promoting impartial study and experiment. It works for the adoption of an auxiliary language by the Governments of the world, and desires the setting up of an International committee of linguistic experts to advise them.

## V

THE FUTURE INTERLANGUAGE  
SOME CONDITIONS IT MUST  
SATISFY

LIKE the Committee of the British Association, like Max Muller, we are of opinion that no national language, whether living or dead, can serve as the world auxiliary.

English is the most modern of the great languages, the most widely spoken, and the most international for it contains more foreign words than any other. Yet, because of its frequent lack of agreement between spelling and pronunciation, its great variety of vowel sounds, the idiomatic character it shares with all natural tongues, and, above all, its lack of political neutrality, English would not be acceptable to all nations. On the other hand, its logical and analytical structure, its swiftness and transparent accuracy of expression, and especially the fact that it has shed most of the old grammatical forms which time has rendered useless and scarcely intelligible, have made English a model, pointing the way which must be followed in building the Interlanguage, the

## THE FUTURE INTERLANGUAGE 45

first language to be constructed deliberately from its foundations by the trained intellects of scholars, working on definite principles of philological science. Such principles have been gradually worked out by patient study, since philology was placed upon firm foundations by the inauguration of the study of Sanskrit, which began with the founding of the Royal Asiatic Society in 1784.<sup>1</sup>

As to French. It has had, and lost, a far greater internationality than it now possesses. Though easier on first acquaintance than many others, it is perhaps of all languages the one of which the intonation and idiomatic charm of phrase are least to be captured by the foreigner. Even in Chaucer's time, though a sort of French was widely spoken in this country, it was by no means the French of France, as he indicates in the prologue to his *Canterbury Tales*.

"And French she spake ful fayre and  
fetisely

After the scole of Stratford atte bowe,  
For Frenche of Parys was to hire  
unknowe"

That French has been chosen as the official

<sup>1</sup> In 1786 Sir William Jones discovered that there was a relationship between Sanskrit, German, and Latin. In 1833 Francis Bopp, of Berlin, wrote the first Comparative Grammar of Sanskrit, Zend, Greek, Latin, Gothic, German, and Icelandic.

language of the International Association of Academies, and some other international bodies, is evidence rather of the need for an interlanguage than proof that French is the most suitable medium. Such bodies, moreover, consist of persons of more than average education. Whilst the League of Nations has made English and French its official languages, the Spanish-speaking Governments clamour for equal treatment, and the Italians threaten to make the same claim.

It is obviously Utopian to hope that, under present conditions, the majority of mankind will acquire two national foreign languages. Such acquisition entails not merely the memorizing of a certain number of words and rules but the formation of new thought- and speech-habits. The difficulty of learning a national language, as compared with one of the artificial schemes, in this case Esperanto, is illustrated by the statement of a Chinese delegate to the Educationists' Conference in Geneva:

"In China we learn the English language during at least six years, French seven years, German eight years, Russian ten years, but for Esperanto only two years are required."

Latin, by reason of its political neutrality as a dead language and its great cultural gifts, has more to recommend it as the

## THE FUTURE INTERLANGUAGE 47

common auxiliary than any other natural language. Yet Classical Latin also has difficulties of idiom and of irregularity, and its inflected character is alien to the tendencies of modern thought.

The Interlanguage must be expressly created for international usage. Without denying the possibility of a new language of symbols in a more distant future, we may postulate that it must satisfy the following conditions:

*It must be a posteriori.* The traditional forms have been gradually moulded by ages of use. Deep echoes of meaning are folded within them. They have become shaped to facility of enunciation by long employment. The incompleteness of all knowledge, and even of research into philological origins, may render it impracticable to realize the philosopher's dream of a vocabulary that would provide an analysis of all learning. Nevertheless, we can possess a world-auxiliary which will largely serve as a master-key to the most universally employed of the great speech-families, and will assist in a readier and deeper understanding of the national tongues. In order that the interlanguage may thus serve us, its vocabulary must be constructed on sound etymological principles.

Philologists must not stand aloof, reviewing the existing interlanguage projects as cast-

iron creations for which they have no sort of responsibility. They must regard the making of the world-auxiliary as an essential part of their work, and must bring to this task the same impartial inquiry, patient research, and critical analysis that they have brought to the study of philology itself.

*The Interlanguage must provide the greatest possible intelligibility therefore it must reach the widest possible internationality*

*It will employ the Roman alphabet*, the only alphabet of printed characters which can claim internationality, for Chinese is a pictured language, and the characters of Arabic and Hindustani are essentially those of handwriting, both occupy too much space on the printed or the written page.

*The Vocabulary of the interlanguage will consist mainly of words common to the Indo-European speech-family*, which comprise an extensive dictionary. Words denoting what is peculiar to their country of origin, like *Geysha*, and newly-coined words of wide acceptance, like "*Robot*", will be retained in their original form.

The vocabulary of modern Europe will be chosen as the basis of the interlanguage, because that vocabulary has been created in the development of modern science and modern thought.

East will gain more than West by this

## THE FUTURE INTERLANGUAGE 49

inevitable decision An immensely larger number of Eastern people learn the languages of Europe than *vice versa* An auxiliary language will be of far greater use to the Chinese if it introduce them to the vehicle of Western science, than if allied to their own tongue Ultimately the value of the Interlanguage must be measured by its gifts, not by the ease with which it can be acquired

The world-auxiliary, used by everyone as a second language, will obviate the general need for any other language save the native one If it were in use to-day, it would be employed by the League of Nations and by the mandated territories It would enable small nations to meet the Great Powers on equal linguistic terms

*Inter-European words will be used in their Latin form, with the classical spelling and pronunciation* Obviously so, for the interlanguage which is already a giant growth in our midst is the new Græco-Latin, the vocabulary of which is constantly accumulating in the use of the young sciences—the strongest unifying influence in the civilized world

Latin has largely contributed to the making of all the other European languages English has been impregnated by Latin of the Roman period, of the Saxon period, which was mainly ecclesiastical, and of a third period,

reaching from the time of the Battle of Hastings to the present day Webster's *English Dictionary* gives 55,000 words of Græco-Latin origin and 22,000 from Teutonic and other sources Even in Russian, Mr Kofman has found, under the letter A alone, 228 Græco-Latin words Actually only about 10 per cent of inter-European words are of non-Latin origin Any artificial language which aims at internationality must contain a majority of words derived from it

To give to everybody's children, all over the world, a language so much like Latin that whoever knows it can read Latin with little study would tremendously accelerate the spread of learning and the breaking down of social barriers Latin, by international agreement, is the universal medium for the technical terms in medicine, anatomy, botany, and zoology It is essential to the lawyer, and largely so to the historian

*The Interlanguage is unlikely to incorporate Latin words which have passed out of current usage* It will select those which, either as root-words or derivatives, have survived in modern speech or have been coined in modern times

*The Interlanguage cannot successfully form its vocabulary from different speech-families, nor can it attempt an amalgam of the forms existing in various branches of the European*

## THE FUTURE INTERLANGUAGE 51

*speech-family* Either of these methods leaves the student, whether a polyglot or a monoglot, without a clue to the source from which the word has been drawn In a language combining both Teutonic and Latin word-forms, one is at a loss to know whether the word *alt* signifies *high*, as in Latin and in the English *alt-i-tude*, or *old*, as in German In the formation of the sentence, subtly interwoven as it is with the processes of thought, with euphony and phonetic evolution and decay, a wider internationality exists<sup>1</sup>, but, in the word itself, to strain after a complete internationality is to achieve none

*The orthography of the Interlanguage must be etymological* It cannot follow the false trail of simplified spelling, which Bacon said "belongs to the class of unprofitable subtleties", and which leads to deformation of the word and the consequent obscuring of meaning and origin Spelling Reform, in reducing a minor obstacle, enhances the difficulty of understanding the meaning of the word, which is of more essential importance It must be remembered that Classical Latin is pronounced as it is spelt, according to the modern view that *C* should be pro-

<sup>1</sup> Yoruba, one of the African languages conjugates its verbs as in English, though its vocabulary is entirely different

nounced like the English *K* and *t* like the English *e*. *Th*, *ph*, and *y*, which duplicate the sounds of *t*, *f*, and *i*, were imported from the Greek, and retained to denote their origin. Such words have found their way into modern languages and their spelling helps to indicate their meaning.

By adopting the Latin orthography, the interlanguage will avoid the need for employing accents, diacritical marks, sibilants, aspirates, or other localized or difficult sounds.

*In accord with modern tendencies, the Interlanguage will be logical and analytical, and will contain no more grammar than is required to elucidate the meaning. Every word will be found in the dictionary.* Thirty years hence the Interlanguage will be familiar as the mother-tongue. Therefore simplification will be motived, rather to secure logic, swiftness, and emphasis than to ease the memory of burdens.

Like other aspects of its civilization, the language of a people passes through many stages. Chinese, with its origins in the far reaches of antiquity, is the most analytical of languages. It has travelled still further than English in minimizing grammar and discarding inflections.

Sanskrit, the most primitive descendant of the Ancient European has eight cases,

## THE FUTURE INTERLANGUAGE 53

Russian and Lithuanian seven, Latin six, Greek five, German four Old-English had six cases—now only the traces of three remain to us Modern Persian has no article, no gender, no concordance, and replaces inflexion by 25 auxiliary verbs Its nouns indicate the plural only where it is not otherwise shown In modern Arabic are similar developments Simplification is intensified in the compromise frontier languages In the Lingua Franca of the Levant the verbs have only one form, originally the infinitive Chinook, the North American trade-language, has a small vocabulary, but, according to Dr Sapir,<sup>1</sup> it is built on strictly analytical lines

In King Alfred's time English adjectives had eleven forms, now we have but one Our verbs also have had a drastic pruning Compare our few simple forms with the 1,400 of the ancient Greek verb, the 395 of the Latin, and the 62 of the modern Spanish In English we produce 40 verb-forms by auxiliaries, only three by inflections Indeed, the whole tendency of modern language is to discard mere grammatical forms, and to replace inflections, where necessary, by qualifying words The language gains thereby in clarity and strength

<sup>1</sup> Chief of the Anthropological Division of the Canadian National Museum

Inflections (the conjugation of verbs, the declension and concordance of nouns, pronouns, and adjectives) are the result of the melting together, or agglutination, of small qualifying words the meaning of which is becoming obscure, and which are but partially if at all, required to convey the sense. They are retained largely as a matter of tradition, and their meaning tends to be duplicated by the additional use of separate qualifying words. Inflections produce endless irregularities. When an arbitrary list of affixes is attached to a large number of stems, some, either of the stems or the affixes, become modified for example the French *vivre*, [*Je*] *vi(v)s*.

The Interlanguage will go even further than English in discarding inflections. *In the verb* comprehensibility can undoubtedly be reached by one unvarying form, qualified by other parts of speech. The modes and tenses are often formed in this way and can thus be more vividly and exactly indicated than by inflections. *I shall see you shortly* and *I shall see you when I can* have the same verbal voice. *Yesterday I sing* could, with usage, come to indicate the past as clearly to us as *yesterday I sang*. The question to be considered is whether the former sentence would be equally satisfying to the mind, and whether we should gain more in simplicity.

## THE FUTURE INTERLANGUAGE 55

by abolishing the indication of the past tense in the verb than we should lose in emphasis

Obviously the analytical English infinitive is more expressive than the inflectional form of most European languages, for other languages frequently use a preposition before the infinitive as well as the inflection. Thus the French say "Dl n'en avoir qu'un à apprendre." The prepositions *de* and *à* are pleonastic.

*The concordance of the verb with its subject, in number and in case,* has almost disappeared in English only the remnants remain, and, being remnants, they have lost their logic. We *love* is sufficient to indicate that the action *love* is predicated of *we*. The French *nous aimons* is redundant. In Italian the pronoun is often dropped.

In English we have not the passive form of the verb, as it existed in Latin. Though the verb *taught*, for example, has a passive meaning, it is merely the past tense of the active verb *to teach*. Some of the artificial languages have been unnecessarily cumbered by the obsolete passive form.

*The agreement of adjectives with the nouns they qualify and the declension of nouns,* which have departed from English, will find no place in the Interlanguage.

*For the sign of plurality* we cannot look to the Latin example, for, being an inflected

language, Latin (like Greek) has no uniform sign. The final s has by far the greatest internat.onality, and has the advantage of being pronounceable after all vowels and most consonants.

Articles will probably be discarded by the Interlanguage. Their use is sometimes purely euphonic, sometimes they indicate number, gender, and case. As these are generally also shown by the noun, their indication by the article is redundant. How conventional is their use is well displayed by the fact that it differs even in the closely allied Romance languages, the Italians saying *la Casa mia*, the Spaniards *mi casa*. In Roumanian the article follows the noun and is declined. Arabic has but one article, Chinese and Persian none. In English we are more and more discarding the article, and the Americans have gone further than we in this direction.

*The Interlanguage will not attach gender to inanimate objects*<sup>1</sup>—only to those possessing it in the actual world of nature, and only where the sense requires it. When the number of substantives indicating sex has been reduced to the proportions dictated by

<sup>1</sup> In Old-English every noun belonged to one of three gender classes. The old equivalents of *day*, *end*, and *ebb* were classed as masculine and referred to as *he*; those of *pipe*, *glove*, and *sorrow* were feminine, and *she* was applied to them.

## THE FUTURE INTERLANGUAGE 57

reason, the learning of the appropriate terms for male and female will impose no great burden on the memory. Moreover, it is always possible to use a special adjective for the purpose, as we frequently do in English, *he-goat* and *she-goat*. Such words as *actor* and *actress*, *executor* and *executrix* are common, in but slightly modified form, to many languages. They are more easily discernible by the ear than the atomic vowel-endings adopted by many of the artificial languages to denote gender.

In syntax, the Interlanguage will follow the order broadly common to the European speech-family, subject, verb, object, with the qualifying words placed as near as possible to the word they qualify.

This estimate of the probable structure of the future-world Interlanguage has been governed by observation of the evolution apparent in natural language. It may be summed up in the words uttered by a clever Sengalese

"What we want is a Latin vocabulary and Chinese grammar."

"Chinese Grammar" may be taken to signify the simplest grammar known, or the virtual absence of formal grammar.

## VI

ANALYSIS OF THE PRINCIPAL INTER-  
LANGUAGE ATTEMPTS

## VOLAPUK

HOW far do the principal modern attempts at interlanguage conform to the evolutionary trend of natural language, and to the features here predicted for the coming world auxiliary?

Schleyer's Volapuk, was largely *a priori*. Its author desired to make it more capable of expressing every nuance of thought than any other language. To this end, he copied many complexities of the natural languages, and added many more devised by his own fancy. He created no fewer than fourteen personal pronouns. These he post-fixed to the stem of the verb, even where its subject was already indicated e.g. *Mary lafob* = *Mary (she) loves*.

Vowels were prefixed to the stem to express all tenses other than the present e.g. *a* for the imperfect, *alofob* = *I loved*. Mode was expressed by suffixes following the pronoun *la* for the subjunctive, *alofobLA* = *I might have loved*, *on* for the infinitive, and so on. There were three forms of imperative mode.

each with its distinctive ending. Each mode had as many tenses as the indicative. The letter *t*, pronounced as a separate syllable and placed immediately before the stem, signified the habitual performance of an action, e.g. *ailofobod* = *I have to love constantly.* The initial *p* indicated the passive voice. A single curious word could express many things, e.g. *peglidolod* = *you must be greeted.* A Volapuk verb could take 505,440 different forms. Its author himself sometimes lost his way in its mazes and felt the need for italicizing the stem. Compound words, formed by juxtaposition, grew to enormous length, and became the subject of ridicule.

The feminine was indicated by *ji* or *of*, prefixed to the noun, the neuter by *os*. Nouns were declined. Adjectives ended in *ik*, and adverbs in *o*. *R* was usually excluded from the alphabet, on the charge that it was difficult to pronounce, yet the English *h* was admitted, also the Spanish, written thus ', and the modified vowels *a*, *o*, *u*. Root-words were made as monosyllabic as possible, as well they might be, considering the number of affixes! Conjugable words might never end in *c*, *i*, *s*, *x*, or *z*.

Schleyer declared that he had based his vocabulary mainly upon English, but he made the stems unrecognizable. *Rose*, stripped of its *r* and its *s*, was given an *l* at

both ends, and became *lol* *Brother* was changed to *blod*, *sister* to *gi-blod*

Root-words were capriciously chosen, with so little regard to the essential part of the word that *sinicity* became *rit*, from which was derived *ritik* = *true* *Origin* became *rig*, and *original* was *rigud*. Confusion was invited by using the mere modification of a single letter to denote large numbers of different words. Thus *to-day* = *adelo*, *yesterday* = *adelo*.

The popularity of Volapuk may be ascribed to three causes. Its author was a capable propagandist, it caught the fervour of the humanitarian and Socialist revival that followed the Franco-German war. Its very oddity was attractive to many seekers after the universal language. To find it scholarly, harmonious, and incorporating familiar words might have disappointed the quest for something unknown. It appealed to the taste that revelled in *Gulliver's Travels* without perceiving its satire, and received with avidity the spurious stories of Baron Munchausen.

*Example*

*O Fat obas kel binol in suls parsaludomoz nem ola!* *Konomod monargan ola!*—from the Lord's Prayer in Volapuk

ESPERANTO

Esperanto has the letters of the Roman

## INTERLANGUAGE ATTEMPTS 61

alphabet, with the exception of *q*, *x*, and *v*. It has in addition one vowel with the breve mark *ü*, and five accented consonants, *ĉ*, *ĝ*, *ĥ*, *ĵ*, *ŝ*, not found in any natural language. As these have to be specially cast, the language cannot be set up from the ordinary fount of printer's type.

The introduction of new letters and new spellings transform the international words adopted by Esperanto, yet the pronunciation is not easy. There are many difficult sounds, including *kv*, *kn*, *sts*.

Like that of Volapuk, the essential principle of the Esperanto vocabulary is the building of words by *a priori* affixes, attached to a limited number of usually monosyllabic stems. Volapuk had three hundred such affixes. Esperanto has sixty-six. *Aliformigilo* = transformator (in electricity), and *tagnok-tegaleco* = equinox are grotesque examples of Esperanto's so-called "autonomous word building."

Father Schleyer chose English as the main source for his stems. Dr Zamenhof aimed at a wider internationality, but he did not submit the words to the test of tracing them through the various European languages to discover which were in widest usage, nor does he appear to have followed any other consistent method of selection.

All Esperanto nouns end in *o*, adjectives in *a*, adverbs in *e*, the personal pronouns and the infinitive of the verb in *i*, impersonal pronouns in *u*, prepositions in *au*. The words are, in fact, classified, not, as in the old philosophical languages, according to their meaning but according to their temporary grammatical rôle. Such grammatical classification did not originate with Esperanto. It occurred in many older systems. The arbitrary endings perform the secondary purpose of assisting the student to detect the grammatical function of the word, but they obscure its etymology. He knows that the word is a noun in that particular sentence, but its meaning he fails to recognize, for its appearance has been changed. *Boa*, for example, has become *boao*, and *rosa*, *rozo*. People who lack a swift perception of grammar will stumble and hesitate in speaking, because, though aware of the meaning of the word, its grammatical rôle in the particular sentence is not clear to them.

Far less can be gained by emphasizing the category in which a word is placed by grammatical convention than is lost by the resultant monotony of the word-endings.

The Esperanto plural is formed, not with *s*, which has the widest internationality, but with *j* pronounced as *y* in *boy* or in *pay*. Critics are warned "to stop short of blas-

## INTERLANGUAGE ATTEMPTS 63

phemy" in recalling that some Greek plurals occur in *y*. Greek being an inflected language, had, however, many plurals. The sounds of *oy* and *eye* did not recur with any approach to the Esperanto frequency. Moreover, they were in harmony with the vocalic structure of ancient Greek and have disappeared from the modern Greek pronunciation. Esperanto stems, chosen now from one language, now from another, have been subjected to no harmonizing influence. Atonic vowel-endings, recalling the Latin languages, are grafted on to Teutonic and Slavonic roots, themselves rendered wholly strange to the eye by Esperanto spelling, and produce such curious words as *Birdoy* = *birds*, pronounced *bear-doy*, *rajdi* = *to ride*, *havi* = *to have*, *rajto* = *right*, *limo* = *limit*.

The Esperanto practice of placing the tonic accent invariably on the penultimate syllable also tends to disguise international words, such as *angelo* = *angel*, and to increase the monotony produced by its grammatical endings. Esperantists protest that if Esperanto is monotonous, so also is French, because its accent always falls on the last syllable. In French, however, variety is obtained by the admixture of vowel and consonantal endings, and the mute *e*. In Esperanto monotony is added to monotony. When attempting verse, its votaries are

obliged to lop off the endings. Thus they re-distribute the tonic accents, and re-establish variety.

The Esperanto feminine is formed by interpolating *in* before the final *o* of the substantive. Thus the old word *mother*, traceable in every branch of the Indo-European language family, becomes that cold stranger, *patrino*.

Esperanto wisely avoids artificial gender. It retains one case ending, the accusative. This is claimed as a special virtue, because, by its means, a sentence can be turned topsy-turvy. An ardent Esperantist has done his best to convince us that it is highly convenient to be able to say "Abelon killed Caino", without thereby controverting the Bible story. The retention of the accusative is, however, an illogical survival.

Another such feature is the agreement of the adjectives with the nouns in number and case. To compensate for this, there is a drastic reduction of the adjectives, by the unhappy expedient of prefixing the particle *mal* to a quality, to form its opposite. The result is unpleasant and inexact. *Bona* in Esperanto is *good*, *malbona* = *bad*. *Not good* is by no means the equivalent of *bad*, nor is *not young* the appropriate term for *old*. Such clumsy and contradictory modes of expression are alien to the spirit of literature.

## INTERLANGUAGE ATTEMPTS 65

Suppose Herrick had written "Not young Time is still a flying", or Blake "Not big lamb, who made thee?"! The particle *mal*, in its wide international usage, denotes the positive quality *ill*, not a mere negation. *Malfermi*, which in Esperanto is *to open*, conveys to every European the idea *imperfectly closed*.

The Esperanto verb admits of no irregularities, and it has abolished the indication of number, but it indicates tense and mode by inflections, instead of by the modern analytical method. There is but one auxiliary—the verb *to be*. This is a lack, for the two principal auxiliaries of being and attribution certainly contribute different shades of meaning, and the trend of modern language is to make a greater use of auxiliaries. In seeking simplification, we should be careful not to reduce the capacity of the language for exact expression.

Dr Zamenhof invented for Esperanto a table of forty-five much debated correlative words, many of which are difficult to pronounce, i.e. *Nen-i-es*, *ki-es*, and *Ti-u*.

Esperanto is much more speedily learnt than any natural language, indeed there is much less in it to learn. It is a great advance upon Volapuk, yet, in spite of its many translations from the classics, it cannot become an efficient medium for literature, or

a genuine link in the European speech-family, unless it is subjected to drastic and fundamental changes

*Example*

*„Mi naskigis en Bjelostoko. Tiu ĉi loko de mia naskigo kaj de miaj infanaj jaroj donis la direkton al ĉiuj miaj estontaj celadoj—*  
from a letter of Dr Zamenhof

IDO

Ido has adopted the main structure of Esperanto. It has abolished the special accented letters, but its own spelling, together with the grammatical finals *o*, *a*, *e*, *i*, which it has taken over from its parent, frequently disguise international words. Words which begin with *ther*, *tur* and *ter*, are all spelt with *ter*. Thus the Ido word *termo*, which might be taken for *term*, turns out to mean *thermal spring*. Root-words are taken from heterogeneous sources. A striking example of Ido reasoning is given in relation to the word *home*. Idists reject the Latin words, *domicilium*, *domus*, and *casa* as giving no true equivalent, also the English *home*, because, as it is a noun, the system would require that a final *o* should be added to it, and *homo* has already been appropriated as the word for *man*. The German *Heim* is excluded, because of its diphthongized pro-

nunciation. Therefore Ido takes the Dutch *hem* and makes it *hemo*, which, so far from being the dear familiar term, from which English Idists could not part, is unrecognizable by any people. Another such word is *summer*, which Ido makes *somero*. But if *home* and *summer* can stand the test of indispensability with *cafe* and *maccaroni*, let them be adopted simply as *hom* and *summer*. Their origin will then be plain. Having no guide to their source, one could not guess the meaning of the following Ido words without reference to the dictionary. *skalo*, from the Latin *scolae*, *tualetar* from the French *toilette*, *tayo* = *waist* from the French *taille*, *shirmar* = *to shelter*, from the German *schirmen*, *torto* (given the Ido noun-ending) one would expect to signify *tort*, which in the sense of *wrong* or *injury* has a wide internationality, and has produced in English the well-known words *tortuous* and *torture*. In Ido, however, *torto* stands for *tart*, because German has *torte* for *tart*, though German has also *tort* for wrong. *Tro-uzar*, which is Ido for *to use to excess*, approximates closely to nursery jargon. The international word *maritime* becomes *marala*, in conformity with the prescribed affixes.

Ido prides itself on its system of derivation, which embodies what Dr Couturat described as "the principle of reversibility."

This must be explained. Esperanto nouns, verbs, adjectives, and adverbs are formed directly from the stem, by adding the allotted vowel-termination. Given the stem, it is quite easy in Esperanto to say what the verb or other part of speech shall be. Ido, on the contrary, has a dual method, which differs according to whether the stem indicates (1) a state of being or an action, (2) the name of a person or thing. No verb can be directly derived from an adjective, or from a noun, unless the noun expresses an act or condition, no substantive from a verb, unless the substantive expresses the state or action denoted by the verb. In other cases an intermediate affix is required, and this affix must be chosen to fit the particular case. Such compact English expressions as *To crown* and *to ship* Idists regard as "inadmissible" in a "logically constructed language to be used by diverse linguistic groups"<sup>1</sup>. Thus in Ido *krono* = *crown*, but *to crown* is *kronizar*, *Paco* = *peace*, *pacar* = *to be at (or in) peace*, *pacigar* = *to pacify or appease*, *paceskar* = *to make peace*, *pacifar* = *to make for peace*, *pacala* = *relating to peace*, *pacema* = *pacific*, *who likes peace*, *pacoza* = *peaceful or which is at peace*, *pacifanta*, *paciganta* = *pacifying*, *pacigo* = *pacification, or peace-making, appeasement*.

<sup>1</sup> Dyer's *Ido Dictionary*, 1924.

## INTERLANGUAGE ATTEMPTS 69

All this is wandering towards the synthetic mazes of Volapuk.

In its conjugation Ido is more synthetic than Esperanto. We do not think the modern mind, particularly that which employs English speech, and the same may be said with even greater reason of the Chinese, will enchain its expression in such grammatical exercises as on next page<sup>1</sup>.

In the third person plural of the pronouns Ido has four forms—general, masculine, feminine, and neuter, redundances which modern language finds unnecessary.

Ido has expunged some Esperanto crudities. It has also created some new ones. A critical examination of its dictionary must result in expelling a large proportion of its words, if internationality is to be the test.

### *Example*

*Nun la mondlingual movado avancas per ke la unesna grupanti, la reala idealisti, esforcas objektale informar la lasta grupanti*  
—K KOZAVI in *Ido*

<sup>1</sup> Dyer's *Ido Dictionary*, 1924.

	<i>Active Voice</i>	
<i>Future</i>	$\left\{ \begin{array}{l} \text{skrib-os} \\ \text{esos skrib-anta} \end{array} \right\}$	= shall (or will) write shall be writing
<i>Perfect</i>	$\left\{ \begin{array}{l} \text{skrib-ab-os} \\ \text{esos skribinta} \\ \text{es-ab-os skrib-anta} \end{array} \right\}$	= will have written will have been writing shall be on the point of writing
<i>Declarative</i>	esos skrib-onta	= shall be on the point of writing
		<i>Passive</i>
<i>Future</i>	$\left\{ \begin{array}{l} \text{esos skrib-ata} \\ \text{skrib-esos} \end{array} \right\}$	= is about to be written will be written
<i>Perfect</i>	$\left\{ \begin{array}{l} \text{esos skrib-ita} \\ \text{es-ab-os skrib-ata} \end{array} \right\}$	= will have been written

## INTERLINGUA

In its vocabulary Interlingua is the most *a posteriori* of the *a posteriori* languages. It goes furthest in eliminating grammar. It is composed of International words, the Latin form of such words being employed wherever it exists. Otherwise either the most international form, or that of the language in which the word originated is chosen. Only those Latin words are used which have a wide internationality in the living languages of to-day. All Anglo-Latin words and all Greek stems which have produced international words are included. For these last Interlingua does not simply employ the Latin orthography, but writes the words according to accepted philological methods of transcribing Greek words in the Roman alphabet. The classical Latin pronunciation is recommended.

In the main, Interlingua can be read at first sight by people of fair education who do not know Latin. The meaning of most of its words can be discovered from a good English dictionary. Some of the small correlative words, all of which are taken direct from the Latin, will have to be learnt. Most of them, however, are familiar to us as affixes, retaining their original meaning even if not used as separate words. These include *ad* = *to*, which we know in *adhere*, *ante* = *before*,

which we have in *antecedent*, *contra = against*, occurring in *contradict*. Many others are common also in Latin phrases which appear frequently in English books, such as *ut infra = as below*, *ut supra = as above*, *idem = the same*. Students who learn these correlative words will not waste their time even should they never make use of Interlingua, because they need them for English itself.

Peano's *Vocabulario Commune* (1915) contains 14,000 Anglo-Latin words, 999 out of every 1,000 of which are common also to Italian and French, whilst the majority are found also in Spanish and German, and many in Russian. This work is valuable to all students of comparative philology. Each word is given in the Latin form chosen for Interlingua, and in the forms it assumes in the other languages. Thus the word is clearly displayed for immediate comparison. The chosen form is accompanied by the endings given to it in the Latin dictionaries used in schools, that of the nominative of the noun and the first person singular of the verb. Post-classical Latin words are accompanied by figures indicating the century to which they belong. The meaning, derivation, and derivatives of each word are also given. For example, it is shown that the Interlingua word *machina*, which, as in all cases, is the

Latin stem according to Peano's method of selection, is *machina* in Italian, *machine* in French and English, *Maschine* in German, *maquina* in Spanish, and *machina* in Portuguese. It is also shown that this word comes from the ancient European *magh*, from which are derived the English *mag* and the German *mogen* and *Macht*. Derivatives are similarly treated. The Interlingua Latin verb *admirare* = *to admire* is shown to produce *admirabile*, which is the same in Italian, is *admirable* in English and in French, and is *admirabel* in German. It also produces in Latin and in Interlingua *admiratione* = *admiration*, and *admiratore* = *admirer*.

A glance through the words thus displayed convinces us that anyone possessing a good knowledge either of English, French, or German has the elements of Inter-European communication. Even where a common substantive or verb may be lacking, the common stem will be found by turning to one of the other parts of speech. Thus, though in English we say *wall*, for what in Latin and Italian is *muro*, in French *mur*, in German *Mau*, we English use the same stem in the adjective *mural* and in the verb *to immure*.

Uninflected Latin words are regarded as stems and retained intact. In the case of inflected words, Peano takes as the stem,

that is to say the essential part of the word, the imperative of the verb, or the infinitive without the suffix *re*, and the ablative case of the noun. In this choice he differs from the authors of most other artificial languages, who divest the stem of all vocalic ending. Thus, whilst Peano regards *rosa*, *pede*, *sensu*, and *libro* as the stem of the words in question, many others take *ros*, *ped*, *sens*, and *lbr*, which have a mutilated appearance, and are often difficult to pronounce. Having thus clipped the words, Volapuk, Esperanto, Ido, Neutral, Romanal, and others add artificial terminations to indicate the grammatical parts of speech. Interlingua, on the contrary, adds nothing to the stem (with the sole exception of *s* to form the plural of nouns) except such endings as actually occur in the Latin form of the existing international word. In other words Interlingua deletes existing grammatical terminations which are held to be unnecessary; it does not coin new ones nor does it take existing affixes and attach them to any words to which they have not hitherto been attached in Latin.

Peano's Dictionary gives a list of suffixes, but these are actual Latin suffixes, already attached to international words. It is not intended to change them about in an arbitrary manner, but to retain them as they have developed in usage.

Those who have become accustomed to the methods of the other artificial languages often find this distinction difficult to grasp. Thus, in his *Short History of the International Language Movement*, Professor A. L. Guérard criticizes Professor Peano's selection of the stem, and urges that the supine is richer in derivatives than the stem as defined in Interlingua. He says:

"We have *scribe*, *to describe*, etc., but we have *script*, *scripture*, we have *legible*, *legend*, but we have *lecture*, *lectern*, we have *agent*, *agenda*, but also *act*, *action*, *active*, in French, we find *corriger* by the side of *correct*, *correction*, *correcteur*. It is pretty safe to say that of the two forms the supine is richer in modern derivatives."

Turning to Peano's Dictionary of Interlingua, we find therein all the forms of the supine indicated by Professor Guérard. The Dictionary shows that Interlingua does not merely use *scribe* = *write*, and *describe* = *describe*, as Professor Guérard says, but also *scripto* = *script* and *scriptura* = *scripture*, as well as all the other forms he has mentioned as international. How is this? The explanation is that Interlingua regards each word from the standpoint of its meaning and its internationality. The Latin past participle ending in *to* (as in *amato*, *scripto*, and the other forms mentioned) is used—but only

where it occurs in international words

The Academia in 1890 (during its Idiom Neutral period) decided to regularize the Latin passive participle, which is not uniform in all verbs and sometimes modifies the stem. In securing uniformity, the Academia created a number of artificial words. This method, the old method of Volapuk, was discarded with the coming of Interlingua. In accord with Peano's dictum that the minimum of grammar is no grammar, inflections, as such, are ruthlessly abolished. Person and number are not indicated by the verb, as these are shown by the noun or pronoun.

Tense is not indicated by the verb, but by qualifying words. *Hodie nos ES in Paris* = *To-day we BE in Paris*, *Heri me ES in Roma* = *yesterday we BE in Rome*, *Cras vos ES in Torino* = *To-morrow we BE in Turin*. In each case the verbal form ES remains unchanged. As in English tense can be indicated by auxiliaries, the past by *e* preceding the verb. *Qui E bibe* = *who HAS drunk*. Peano shows that *e* in this sense is derived from the ancient European, being so used in Greek and in Latin. The future can be denoted by *i*. *Qui i bibe* = *who will drink*, or, more literally, *who will go to drink*, for *i* is the stem of the verb *to go*. It occurs in Latin *is, ibi, item, ire*, Italian *andare, ire gire*, *ira, ito*, French = *aller, irais, iras, ira*,

## INTERLANGUAGE ATTEMPTS 77

*irai*, Spanish, *ir, iba, ido*, Portuguese, *ir, ia, ido*. The same stem is found in the English words *transitory* and *itinerant*. Desire and obligation are indicated by the auxiliaries *vol* which we English find in *voluntary*, and *debt*, which has given us *debit*.

The modes of the verb are not indicated by any change in its form, but by prepositions, as in English. The Latin phrase *In dubio abstine = in doubt abstain* is unchanged in Interlingua, because, in this case, the Latin phrase has no inflections to discard.

For the infinitive the stem alone is generally used, adding, where necessary, the Latin preposition *ad*, which has the same meaning as the English *to*. *I Study, I desire to study* is rendered *Me stude, me vol stude. Me habe libros AD stude = I have books TO study*. When the infinitive is employed as an abstract noun, the Greek article *to = the*, which comes from the ancient European, can be used, thus *To err is human = to erra es humano*. This expedient perhaps slightly opens the door to the patchwork process of combining diverse linguistic elements according to individual fancy, which has produced a plethora of hybrid artificial languages. Peano himself usually prefers to invert the statement, and make it simply *homo erra = man errs*.

Adjectives are invariable. Nouns lose

their case-endings. The genitive is expressed by *de* as in French. The plural of nouns is formed in *s*, but only used where not otherwise indicated. For instance *leones* = *lions*, but *duo leone* = *two lions*. Sex is indicated only where the sense requires it, the existing form of masculine and feminine being used, or the noun followed by *mas* or *femina*, to indicate the sex, as in the Latin *canis mas*, *canis femina*. The article is completely abolished.

The pronouns are the direct or indirect case of the Latin pronouns, chosen again on the principle of internationality and used without indication of case. *Me* = *me*, *I*, *te* = *thou*, *illo* = *he*, *him*, *nos* = *we*, *us*, *vos* = *you*, *illos* = *they*, *them*.

Interlingua is generally accepted as easier to read at first sight than the other artificial languages. Some critics object that its retention of the Latin terminations makes it less easy to write and speak correctly than if it were to adopt a regular series of artificial suffixes. Interlinguists reply that there is no greater difficulty in remembering the end of a word than any other part of it, that Interlingua words are already familiarized by international usage, and that to attach to familiar stems a set of arbitrary suffixes would be to make them difficult and strange.

New Latin words are constantly made to

fulfil new functions largely for naming inventions and discoveries. The coinage proceeds upon established and well-known principles. The general use of an interlanguage based on Latin would inevitably increase it, but the words would appear only in response to need.

*Example*

*Tunc surge multitudine de studios novo,  
unde resulta que linguas de Europa habet  
numeroso vocabulo commune, que vocabu-  
lario internationale es in quasi totalitate  
latino, et que illo suffice pro construe lingua  
toto naturale intelligible ad primo usu aut  
quasi ab omni homo culto, et plus simplice  
et regulare que Volapuk*

**ROMANAL**

Romanal is an attempt to combine the internationality and Latinity of Interlingua with a grammatical structure similar to that of Esperanto. Its author, Dr A. Michaux, of Boulogne-sur-Mer, is a member of the Academia pro Interlingua, which he has followed in his wise choice of Latin surviving in the living languages, as the basis of his vocabulary. Like the Academia, he adopts the Latin orthography and pronunciation, but, following Esperanto, he allots a special letter to terminate each of the grammatical parts of speech. Proper names (as in

Esperanto) are made to conform to this system, *America* becoming *Americe* Volapuk, Esperanto, and Ido are followed in word-building by a series of affixes attachable to any stem. In this manner regularity is attained, but the familiar aspect of Latin international words is sacrificed. *Monte*, for instance, becomes *Montasse*.

Ignoring the modern trend towards the analytical, Dr Michaux has invented a new synthetic conjugation of the verb. He forms the active voice, in all modes and tenses, without an auxiliary. He employs the auxiliary *to be* for the passive voice, but, instead of the Latin *esse*, uses the Spanish *estar*. His conjugation includes such forms as *me amaveran* = *I shall have loved*, *me amavun* = *I should have loved*, *amavant* = *having loved*, *amerav* = *to have the duty to love*, *amerant* = *having the duty to love*, *amerat* = *having the duty to be loved*. These complicated forms are much nearer to Volapuk than anything in Ido or in Esperanto.

The method of derivation is midway between Esperanto and Ido. If the stem is that of an object, the verb suffix can be added, as in Esperanto, without an intermediate affix. Thus *coron-e* = *crown*, *coronar* = *to crown*<sup>1</sup>, but, if the stem indicates a

<sup>1</sup> Compare with Ido *Kron-o* = *crown*, *Kron-iz-iir* = *to crown*.

## INTERLANGUAGE ATTEMPTS 81

person, an intermediate affix is required. If the stem is that of a verb, an intermediate affix is required to form a substantive.

Romanal is an effort to combine two mutually conflicting policies.

### *Example*

*Li Meliori lingue auxiliari est ille quel possan facilim comprehendar li americanos del norde et illos del sude*

## UNIVERSAL

Universal (1903), later called Panroman (1906), by Dr H. Molenaar, is another neo-Latin language. Its vocabulary is formed from words found in at least two of the Romance languages. Dr Molenaar has made the common mistake of attempting to simplify international words in a haphazard manner. Moreover, his choice of stems is not reduced to rule. Etymology is obscured in such words as *Kan* = dog, *Kar* = dear, *laser*, from the French *laisser*.

### *Example*

*Kommunikaziom internazional devien semper plus grand Un facil komprehension mutual es nezes in komerz, art, szienz, in viagi kongresi e mil okasioni*

Universal has been put to practical use in the Positivist quarterly *Humanitat*.

## MIDIAL EUROPAN

Joseph and Bettı Weisbart have displayed a charming ingenuity in the illustrated textbook of their Lingue Medial European. European attempts to provide a mean between the Latin and the German and Slav languages. To the difficulties produced by that attempt, it adds its own method of spelling. Esperanto is followed in the grammatical terminations, though the endings are different. The verb is synthetic.

*Example*

*Tutis es silent. Ni home es exter le domes ultra le duktentio del kaval-vagon, qui ueha pole voye via le ponte al vilaje.—Ilustrat ABECEDARIE del Lingue Medial European*

## OCCIDENTAL

Occidental, by E. von Wahl (Reval), has its circle of adherents and its monthly magazine *Kosmoglott*. It is a partially *a priori* amalgam, based on the principal European languages. Curious features are *n'* to indicate *ny*, and *l'* to indicate *ly* (as in the English *folio*), also the use of double consonants, for example *stopp* = *stop*. The juxtaposition of words from various languages sometimes modified according to the fancy of the author, makes a discordant impression, for instance *along* = *along*, *alor* = *then*, *alqual* = *somewhat*, *chascun* =

*everyone*, *n̄qui* = *no one*, *n̄cos* = *nothing*,  
*m̄em* = *even*, *nyti* = *airily*

The choice of auxiliary verbs is whimsical. *Fe* = *did*, which assists in forming the preterite, is purely *a priori*, as is *v̄ll*, the auxiliary used to form the conditional. *F̄e*, by the way, is not the past tense of *fār* = *to make* or *to do*, it is used only as auxiliary to the formation of the preterite. *Vell* also has only the one use. The same is true of *va*, the auxiliary used for the future tense, though it is evidently drawn from the Latin *vado* = *to go*. *Ples* in an adaptation of the English *please*.

In a new language aiming at grammatical simplicity, it is strange to introduce a synthetic perfect, and also two auxiliaries to indicate the past, *fe* = *did*, and *hav* = *to have*. *Fe* is in part used like the English *did*, but in English, of course, *did* is used correctly only in the negative and interrogative. To employ it in the affirmative is colloquial, if not vulgar. Modern analytical language is not content to divide tense into the old grammatical categories. It calls for limitless shades of meaning. These must be conveyed by appropriate words, not by a mere variety of forms, which express no actual difference in meaning. *I sang* and *I did sing* convey nothing different, nor do their Occidental equivalent *me cantat*, and *me fe cantat*.

*Example*

*Mi constata ancor un vez, que Occidental es un lingue occidental, e pro lo usar anc un occidental historic heredad transcription, e las usaciones del Arab Japanes etc, por nos res obligativ —E VON WAHL in Kosmoglott*

## A SUMMARIZED VIEW

The various auxiliary-language attempts are tending towards a common goal—the elimination of formal grammar and a vocabulary of inter-European words with an overwhelming preponderance of Latin. In spite of the obdurates, philological discussions are constantly proceeding between the various schools, and it becomes increasingly clear that the creation of an acceptable medium is a long task, in which the labour of many minds must be combined.

The greater share of the first spade-work for Interlanguage was done by the Socialists and lovers of popular fraternity, then came the Pacifists and the humanitarians. To-day science, commerce, diplomacy, sociology, and the general world of public opinion begin to recognize Interlanguage as a necessity.

For the ideal of a world medium of understanding and utility, of pacification and fraternity, the work of the Esperantists has been unrivalled. It is a great monument of devotion and ability. The palm for linguistic

## INTERLANGUAGE ATTEMPTS 85

excellence, amongst the existing interlanguages, must, on the other hand, be given to Peano's Interlingua, because it is the first systematic attempt to build up an inter-European vocabulary on a consistent scientific basis, because it goes furthest in the elimination of grammar, under the guidance of observed tendencies in natural language, above all, because it is a logical etymological attempt to create the poor man's simplified Latin, which will open to him the nomenclature of the sciences, and will enable him to understand the prescription of his doctor and the legal phrases contained in the lawyer's presentment of his case.

## VII

### THE GOVERNMENTS AND THE INTERLANGUAGE

THE Interlanguage cannot be the creation of Governments. No Government attempts to dictate in regard to the grammar and syntax of the national tongue. Even in France such matters are left to the *Académie*. Government schools everywhere teach according to the generally accepted canons established by those who make a special study of the given subject. So with the Interlanguage, it will develop with the general consensus of world-opinion, led by the specialists. Its discovery and perfection must be mainly the work of philologists, working, not as propagandists and politicians, but as scientists and students. After the philologists will come the stylists, the poets, and thinkers.

Even should all, or most, Governments, perhaps through the medium of the League of Nations, be induced to give official recognition to one of the existing artificial languages, the decision would be merely formal. The real decision would rest, first with savants, whose researches are continuous, secondly with the mills of usage in

## GOVERNMENTS & INTERLANGUAGE 87

which the interlanguage will become practical, and in which, though in some aspects it may be vulgarized, in the large result it will be beautified and enriched

Unless the decision of Cabinets be in harmony with social needs and fundamental linguistic tendencies, it will not stand. If they reject the Interlanguage it will nevertheless make progress.

Governments desirous of furthering the establishment of a world-auxiliary should first endow interlanguage research. Chairs of synthetic philology should be established in all universities. An Interlanguage Institute should be created for comparative inter-European philological research, for the study of compromise-languages, for the classification and analysis of grammar and phonetics, and for research into their evolution in all parts of the world, viewed from the interlanguage standpoint. This Institute should be established in each country and at an international centre. The greatest philologists should be enlisted for its work. Reports should be issued by it to the Press, the Learned Societies, and educational institutions. Its function would be advisory, but if it were an efficient body, it would achieve a commanding influence.

Thus the Interlanguage would be established by the development of a general

consensus of world philological opinion. For a period, the resultant language would remain fluid. Various schools of thought would adopt various modifications of the general speech. Already, though they have grown up haphazard, the existing competing artificial languages have come to possess so much in common that they have been described as dialects of a common language.

The practical test of the Interlanguage will be intelligibility. Men and women will not cling to forms which do not convey their meaning to others. Moreover, average people readily accept the dicta of specialists in matters of learning. Scientists are the most harmonious section of humanity, and may be trusted to assist the world in finding an acceptable medium.

Interlanguage teaching in elementary and secondary schools should at present be frankly tentative. The wise teacher of chemistry informs the pupils that the science is in a state of flux, that the theories of twenty years ago have been overturned, and those of to-day may also in time be discarded. So with Interlanguage pupils should be informed of the true position. Simple courses in comparative philology should be given. Children should be taught to trace inter-European words in the forms they have acquired in the various European languages,

## GOVERNMENTS & INTERLANGUAGE 89

and to decompose and analyse words in their native language which have come from Latin or other foreign sources. Such instruction is particularly valuable to children speaking our hybrid English. The course should include a review of the grammatical changes which have occurred in the native language and of grammatical tendencies in other languages. An account of the interlanguage movement should also be given.

As specialized philological opinion upon the Interlanguage reaches a fairly general consensus, it will be embodied in text-books for use in the regular curricula of schools.

The Interlanguage will introduce new social strata both to international communications and to culture. It will grow with employment, as all other languages have grown. Yet its basis will lie in the historical accumulations of long ages. Like every living language, it will provide for new inventions and new ideas, new words built in harmony with accepted standards, and with affixes already in habitual use. In the Interlanguage, no more than in other languages, will there be many writers desirous of achieving the creation of five new words a year, as recommended by a certain American writer.

The Interlanguage will provide a means by which the thoughts and emotions of mankind,

as expressed in language, may achieve a world-comprehension, which is to-day possible only in music.

There is work here for our teachers and students, our pacifists, and our sociologists. Let them rally to the standard of Inter-language—to perfect it, and to advance it.

## VIII

### IN THE FUTURE

WE are looking towards a future in which the procuring of mere food and raiment and a modicum of shelter will not monopolize so large a share of the individual life and energy as is now the case. The present widespread material scarcity will be replaced by abundance, education and culture will be widely diffused.

With economic problems and rivalries largely swept away by the advent of plenty for all, and, consequently, with a healthier, more contented, and more united world-population, great cultural changes will take place. These will enhance the utility of the Interlanguage.

The newspapers will no longer fill their columns with accounts of larceny and intemperance, wars, industrial disputes, and the speeches of party politicians. Science, art, and literature will take first place. Only the pages devoted wholly to literature will be printed in the national language. The news will appear in the Interlanguage. Where thousands of people are to-day interested in reading of what others have

done in art and science, millions will then delight in their actual pursuit. These millions will be eager for news of the discoveries of people engaged in similar activities all over the globe. The frontiers will form no barrier and insularity will be no more.

The mechanism of the Press will be revolutionized. The news will be transmitted by wireless telegraphy, and its impression recorded on metal from which it may be printed. No typesetting machine will be required. The synchronized tape-machine is the precursor of this development.

By using the Interlanguage it will be possible to send all news to one world receiving-station, for retransmission everywhere, or to three, four, or five such stations, if preferred. Events of universal importance will be conveyed in concise words that will require no re-writing. Much of to-day's tedious sub-editing will disappear. Though world-society will have become more homogeneous, certain news items will be of greater interest to certain parts of the world than to others. These may be supplemented by special articles which may appear in the Interlanguage. If they contain expert information or important local opinion, they will be copied by papers in other parts of the world.

All scientific and technical books and

journals will be written in the Interlanguage. During an interim period, before everyone has a familiar knowledge of it, some works may be written in the native tongue of their authors and published simultaneously with an Interlanguage translation. Scientists have such vital need of co-operation that they will gladly clothe their thoughts in the language that will be common to their international fraternity, just as they did of old in Latin. Based on Latin, the main vehicle of their existing nomenclature, the Interlanguage will prove no difficult barrier to them.

Interlanguage will accelerate scientific research and increase the speed of international communications. It will be used for foreign correspondence, and conferences, and for broadcasting, always for trans-frontier, and frequently for home telephonic and telegraphic communications. It will be displayed in street signs and public vehicles. It will be as familiar to the eye as the national language. No traveller will fail to understand it.

Probably fifty (perhaps even thirty) years hence no one will be troubled by learning the Interlanguage. It will be acquired at the toddling age, side by side with the mother-tongue.

The schools will be wholly bi-lingual. The

Interlanguage and the native language will be used in teaching children, who will enter school with a familiar-speaking knowledge of both. For arithmetic, geometry, mathematics, astronomy, chemistry, the geography and history of foreign countries, the Interlanguage will be the vehicle of instruction, the national language being employed for the literature, history, and geography of the native land. Elocution will be practised in both tongues.

The children will correspond with school-fellows and club-mates in distant countries. Such international associations of the world's youth as the boy and girl scouts, and the present small scale organization of school-journeys are mere tentative beginnings of what is destined to be a great movement of the young people of all countries—stretching forth with the buoyant enthusiasm of youth to learn the universe. To-day many a lad joins the Army with the sole purpose of going abroad. To-morrow, aided by radiophony, television, the Interlanguage, and countless enlarging means of education and travel, all children will revel in finding the world open to their adventure.

The Interlanguage will play its part in the making of the future, in which the peoples of the world shall be one people—a people cultured and kind, and civilized beyond

IN THE FUTURE                  95

to-day's conception, speaking a common language, bound by common interests, when the wars of class and of nations shall be no more



## TO-DAY AND TO-MORROW

*Each, post free, bound, 2/0 net*

THIS series of books, by some of the most distinguished English thinkers, scientists, philosophers, doctors, critics, and artists, was at once recognized as a noteworthy event. Written from various points of view, one book frequently opposing the argument of another, they provide the reader with a stimulating survey of the most modern thought in many departments of life. Several volumes are devoted to the future trend of Civilization, conceived as a whole, while others deal with particular provinces. It is interesting to see in these neat little volumes, issued at a low price, the revival of a form of literature, the Pamphlet, which has been in disuse for many years.

*Published by*

KEGAN PAUL, TRENCH, TRUBNER & CO., LTD  
Broadway House 68-74 Carter Lane, London, E C 4

## TO-DAY AND TO-MORROW

### FROM THE REVIEWS

*Times Literary Supplement* An entertaining series of vivacious and stimulating studies of modern tendencies'

*Spectator* Scintillating monographs "

*Observer* 'There seems no reason why the brilliant To day and To morrow Series should come to an end for a century of to-morrows At first it seemed impossible for the publishers to keep up the sport through a dozen volumes, but the series already runs to more than two score A remarkable series "

*Daily Telegraph* "This admirable series of essays, provocative and brilliant"

*Nation* 'We are able to peer into the future by means of that brilliant series [which] will constitute a precious document upon the present time"—*F. S. Eliot*

*Manchester Dispatch* "The more one reads of these pamphlets, the more avid becomes the appetite We hope the list is endless"

*Irish Statesman* "Full of lively controversy"

*Daily Herald* "This series has given us many monographs of brilliance and discernment The stylistic excellencies of this provocative series"

*Field* 'We have long desired to express the deep admiration felt by every thinking scholar and worker at the present day for this series We must pay tribute to the high standard of thought and expression they maintain As small gift books, austere yet prettily produced, they remain unequalled of their kind We can give but the briefest suggestions of their value to the student, the politician, and the voter "

*New York World* 'Holds the palm in the speculative and interpretative thought of the age"

## TO-DAY AND TO-MORROW

### VOLUMES READY

**Daedalus, or Science and the Future**  
By J B S HALDANE, Reader in  
Biochemistry, University of Cambridge  
*Seventh impression*

A fascinating and daring little book"—*Westminster Gazette* "The essay is brilliant sparkling with wit and bristling with challenges"—*British Medical Journal*

"Predicts the most startling changes"—*Morning Post*

**Callinicus, a Defence of Chemical Warfare** By J B S HALDANE *Second impression*

Mr Haldane's brilliant study"—*Times Leading Article* "A book to be read by every intelligent adult"—*Spectator* "This brilliant little monograph"—*Daily News*

**Icarus, or the Future of Science** By  
BERTRAND RUSSELL, F R S *Fourth impression*

"Utter pessimism"—*Observer* "Mr Russell refuses to believe that the progress of Science must be a boon to mankind"—*Morning Post* "A stimulating book, that leaves one not at all discouraged"—*Daily Herald*

**What I Believe** By BERTRAND RUSSELL,  
F R S *Third impression*

"One of the most brilliant and thought stimulating little books I have read—a better book even than *Icarus*"—*Nation* "Simply and brilliantly written"—*Nature* In stabbing sentences he punctures the bubble of cruelty, envy, narrowness, and ill-will which those in authority call their morals"—*New Leader*

## TO-DAY AND TO-MORROW

**Tantalus, or the Future of Man** By F C S SCHILLER, D Sc, Fellow of Corpus Christi College, Oxford *Second impression*

They are all (*Daedalus*, *Icarus*, and *Tantalus*) brilliantly clever, and they supplement or correct one another"—*Dean Inge*, in *Morning Post* Immensely valuable and infinitely readable"—*Daily News* The book of the week"—*Spectator*

**Cassandra, or the Future of the British Empire** By F C S SCHILLER, D Sc

"We command it to the complacent of all parties"—*Saturday Review* "The book is small, but very, very weighty, brilliantly written, it ought to be read by all shades of politicians and students of politics"—*Yorkshire Post* "Yet another addition to that bright constellation of pamphlets"—*Spectator*

**Quo Vadimus? Glimpses of the Future**  
By E E FOURNIER D'ALBE, D Sc., *Second Impression*

"A wonderful vision of the future A book that will be talked about"—*Daily Graphic*

A remarkable contribution to a remarkable series"—*Manchester Dispatch* Interesting and singularly plausible"—*Daily Telegraph*

**Thrasyymachus, the Future of Morals**  
By C E M JOAD, author of "The Babbitt Warren," etc *Second impression*

'His provocative book"—*Graphic*  
Written in a style of deliberate brilliance"—*Times Literary Supplement* As outspoken and unequivocal a contribution as could well be imagined Even those readers who dissent will be forced to recognize the admirable clarity with which he states his case A book that will startle"—*Darly Chronicle*

## TO-DAY AND TO-MORROW

**Lysistrata, or Woman's Future and Future Woman** By ANTHONY M LUDOVICI, author of "A Defence of Aristocracy," etc *Second Impression*

"A stimulating book. Volumes would be needed to deal, in the fullness his work provokes, with all the problems raised"—*Sunday Times* "Pro feminine but anti feminist"—*Scotsman* "Full of brilliant commonsense"—*Observer*

**Hypatia, or Woman and Knowledge** By MRS BERTRAND RUSSELL With a frontispiece *Third impression*

An answer to *Lysistrata* "A passionate vindication of the rights of woman"—*Manchester Guardian* Says a number of things that sensible women have been wanting publicly said for a long time"—*Daily Herald*

**Hephaestus, the Soul of the Machine** By E E FOURNIER D'ALBE, D Sc

"A worthy contribution to this interesting series A delightful and thought-provoking essay"—*Birmingham Post* "There is a special pleasure in meeting with a book like *Hephaestus*. The author has the merit of really understanding what he is talking about"—*Engineering* An exceedingly clever defence of machinery"—*Architects Journal*

**The Passing of the Phantoms** a Study of Evolutionary Psychology and Morals By C J PATTEN, Professor of Anatomy, Sheffield University With 4 Plates

"Readers of *Daedalus, Icarus and Tantalus*, will be grateful for an excellent presentation of yet another point of view"—*Yorkshire Post* "This bright and bracing little book"—*Literary Guide* "Interesting and original"—*Medical Times*

## TO-DAY AND TO-MORROW

**The Mongol in our Midst** a Study of  
Man and his Three Faces By F G  
CROOKSHANK, M D, F R C P With 28  
Plates *Second Edition, revised*

'A brilliant piece of speculative induction"—*Saturday Review* "An extremely interesting and suggestive book, which will reward careful reading"—*Sunday Times* "The pictures carry fearful conviction"—*Daily Herald*

**The Conquest of Cancer** By H W S  
WRIGHT, M S, F R C S Introduction  
by F G CROOKSHANK, M D

'Eminently suitable for general reading  
The problem is fairly and lucidly presented  
One merit of Mr Wright's plan is that he tells  
people what, in his judgment, they can best  
do, *here and now*"—From the *Introduction*

**Pygmalion, or the Doctor of the Future**  
By R McNAIR WILSON, M B

'Dr Wilson has added a brilliant essay  
to this series"—*Times Literary Supplement*

This is a very little book, but there is much  
wisdom in it"—*Evening Standard* "No  
doctor worth his salt would venture to say that  
Dr Wilson was wrong"—*Daily Herald*

**Prometheus, or Biology and the Ad-  
vancement of Man** By H S JENNINGS,  
Professor of Zoology, Johns Hopkins  
University

'This volume is one of the most remarkable  
that has yet appeared in this series Certainly  
the information it contains will be new to most  
educated laymen It is essentially a discussion  
of heredity and environment, and it  
clearly establishes the fact that the current  
use of these terms has no scientific  
justification"—*Times Literary Supplement*  
'An exceedingly brilliant book"—*New Leader*

## TO-DAY AND TO-MORROW

**Narcissus**, an Anatomy of Clothes By GERALD HEARD With 19 illustrations "A most suggestive book"—*Nation* "Irresistible Reading it is like a switchback journey Starting from prehistoric times we rocket down the ages"—*Daily News* "Interesting, provocative, and entertaining"—*Queen*

**Thamyris**, or Is There a Future for Poetry? By R C TREVELYN Learned, sensible, and very well written—"Affable Hawk," in *New Statesman* Very suggestive—"J C Squire," in *Observer* "A very charming piece of work, I agree with all, or at any rate, almost all its conclusions"—*J St Loe Strachey* in *Spectator*

**Proteus**, or the Future of Intelligence By VERNON LEE, author of "Satan the Waster," etc

"We should like to follow the author's suggestions as to the effect of intelligence on the future of Ethics, Aesthetics, and Manners Her book is profoundly stimulating and should be read by everyone"—*Outlook* "A concise, suggestive piece of work"—*Saturday Review*

**Timotheus**, the Future of the Theatre By BONAMY DOBREE, author of "Restoration Drama," etc

"A witty, mischievous little book, to be read with delight"—*Times Literary Supplement* "This is a delightfully witty book"—*Scotsman* "In a subtly satirical vein he visualizes various kinds of theatres in 200 years' time His gay little book makes delightful reading"—*Nation*

## TO-DAY AND TO-MORROW

**Paris, or the Future of War** By Captain  
B H LIDDELL HART

"A companion volume to *Callimachus*  
A gem of close thinking and deduction"—*Observer*  
"A noteworthy contribution to  
a problem of concern to every citizen in this  
country"—*Daily Chronicle* "There is some  
lively thinking about the future of war in  
*Paris*, just added to this set of live wire  
pamphlets on big subjects"—*Manchester  
Guardian*

**Wireless Possibilities** By Professor  
A M LOW With 4 diagrams

"As might be expected from an inventor  
who is always so fresh, he has many inter-  
esting things to say"—*Evening Standard*  
"The mantle of Blake has fallen upon the  
physicists To them we look for visions, and  
we find them in this book"—*New Statesman*

**Perseus of Dragons** By H F SCOTT  
STOKES With 2 illustrations

"A diverting little book, chock-full of ideas  
Mr Stokes' dragon-lore is both quaint and  
curious"—*Morning Post* "Very amusingly  
written, and a mine of curious knowledge for  
which the discerning reader will find many  
uses"—*Glasgow Herald*

**Lycurgus, or the Future of Law** By  
E S P HAYNES, author of "Concerning  
Solicitors," etc

"An interesting and concisely written book"  
—*Yorkshire Post* He roundly declares that  
English criminal law is a blend of barbaric  
violence, medieval prejudices and modern  
fallacies A humane and conscientious  
investigation"—*T P's Weekly* "A thought-  
ful book—deserves careful reading"—*Law  
Times*

## TO-DAY AND TO-MORROW

**Euterpe, or the Future of Art** By LIONEL R MCCOLVIN, author of "The Theory of Book-Selection"

Discusses briefly, but very suggestively, the problem of the future of art in relation to the public"—*Saturday Review* "Another indictment of machinery as a soul-destroyer

Mr Colvin has the courage to suggest solutions"—*Westminster Gazette* "This is altogether a much-needed book"—*New Leader*

**Pegasus, or Problems of Transport**  
By Colonel J F C FULLER, author of "The Reformation of War," etc With 8 Plates

'The foremost military prophet of the day propounds a solution for industrial and unemployment problems It is a bold essay and calls for the attention of all concerned with imperial problems"—*Daily Telegraph* 'Practical, timely, very interesting and very important"—*J St Los Strachey, in Spectator*

**Atlantis, or America and the Future.**  
By Colonel J F C FULLER

"Candid and caustic"—*Observer* Many hard things have been said about America, but few quite so bitter and caustic as these"—*Daily Sketch* He can conjure up possibilities of a new Atlantis"—*Clarion*

**Midas, or the United States and the Future** By C H BRETHERTON, author of "The Real Ireland," etc

A companion volume to *Atlantis* "Full of astute observations and acute reflections this wise and witty pamphlet, a provocation to the thought that is creative"—*Morning Post* A punch in every paragraph One could hardly ask for more meat"—*Spectator*

## TO-DAY AND TO-MORROW

**Nuntius, or Advertising and its Future**  
By GILBERT RUSSELL

'Expresses the philosophy of advertising concisely and well"—*Observer* It is doubtful if a more straightforward exposition of the part advertising plays in our public and private life has been written"—*Manchester Guardian*

**Birth Control and the State a Plea and a Forecast** By C P BLACKER,  
*M.C., M.A., M.R.C.S., L.R.C.P.*

"A very careful summary"—*Times Literary Supplement* "A temperate and scholarly survey of the arguments for and against the encouragement of the practice of birth control"—*Lancet* 'He writes incisively, moderately, and from wide knowledge, his book undoubtedly gives a better understanding of the subject than any other brief account we know It also suggests a policy"—*Saturday Review*

**Ouroboros, or the Mechanical Extension of Mankind** By GARET GARRETT

'This brilliant and provoking little book"—*Observer* "A significant and thoughtful essay, calculated in parts to make our flesh creep"—*Spectator* A brilliant writer, Mr Garrett is a remarkable man. He explains something of the enormous change the machine has made in life"—*Daily Express*

**Artifex, or the Future of Craftsmanship**  
By JOHN GLOAG, author of "Time, Taste, and Furniture"

"An able and interesting summary of the history of craftsmanship in the past, a direct criticism of the present, and at the end his hopes for the future Mr Gloag's real contribution to the future of craftsmanship is his discussion of the uses of machinery"—*Times Literary Supplement*

## TO-DAY AND TO-MORROW

**Plato's American Republic** By J  
DOUGLAS WOODRUFF *Third impression*

Uses the form of the Socratic dialogue with devastating success. A gently malicious wit sparkles in every page"—*Sunday Times* "Having deliberately set himself an almost impossible task, has succeeded beyond belief"—*Saturday Review* "Quite the liveliest even of this spirited series"—*Observer*

**Orpheus, or the Music of the Future** By  
W J TURNER, author of 'Music and  
Life,' *Second impression*

A book on music that we can read not merely once, but twice or thrice. Mr Turner has given us some of the finest thinking upon Beethoven that I have ever met with"—*Ernest Newman in Sunday Times* "A brilliant essay in contemporary philosophy"—*Outlook* "The fruit of real knowledge and understanding"—*New Statesman*

**Terpander, or Music and the Future** By  
E J DENT, author of "Mozart's Operas"

In *Orpheus* Mr Turner made a brilliant voyage in search of first principles. Mr Dent's book is a skilful review of the development of music. It is the most succinct and stimulating essay on music I have found"—*Musical News* "Remarkably able and stimulating"—*Times Literary Supplement* "There is hardly another critic alive who could sum up contemporary tendencies so neatly"—*Spectator*

**Sibylla, or the Revival of Prophecy** By  
C A MACE, University of St Andrew's

An entertaining and instructive pamphlet"—*Morning Post* "Places a nightmare before us very ably and wittily"—*Spectator*

Passages in it are excellent satire, but on the whole Mr Mace's speculations may be taken as a trustworthy guide to modern scientific thought"—*Birmingham Post*

## TO-DAY AND TO-MORROW

**Lucullus, or the Food of the Future** By OLGA HARTLEY and MRS C F LEYFL, authors of "The Gentle Art of Cookery"

"This is a clever and witty little volume in an entertaining series, and it makes enchanting reading"—*Times Literary Supplement*

Opens with a brilliant picture of modern man, living in a vacuum cleaned, steam-heated, credit-furnished suburban mansion 'with a wolf in the basement'—the wolf of hunger. This banquet of epigrams"—*Spectator*

**Procrustes, or the Future of English Education** By M ALDERTON PINK

'Undoubtedly he makes out a very good case"—*Daily Herald* "This interesting addition to the series"—*Times Educational Supplement* "Intends to be challenging and succeeds in being so. All fit readers will find it stimulating"—*Northern Echo*

**The Future of Futurism.** By JOHN RODKER

"Mr Rodker is up-to-the-minute, and he has accomplished a considerable feat in writing on such a vague subject, 92 extremely interesting pages"—*T S Eliot*, in *Nation* "There are a good many things in this book which are of interest"—*Times Literary Supplement*

**Pomona, or the Future of English** By BASIL DE SELINCOURT, author of "The English Secret", etc

"The future of English is discussed fully and with fascinating interest"—*Morning Post* "Full of wise thoughts and happy words"—*Times Literary Supplement* "His later pages must stir the blood of any man who loves his country and her poetry" *J C Squire*, in *Observer* "His finely-conceived essay"—*Manchester Guardian*

## TO-DAY AND TO-MORROW

**Balbus, or the Future of Architecture**  
By CHRISTIAN BIRMAN, editor of "The Architects' Journal"

A really brilliant addition to this already distinguished series. The reading of *Balbus* will give much data for intelligent prophecy, and incidentally, an hour or so of excellent entertainment"—*Spectator*. Most readable and reasonable. We can recommend it warmly"—*New Statesman*. "This intriguing little book"—*Cotnoor's*"

**Apella, or the Future of the Jews** By A QUARTERLY REVIEWER

'Cogent, because of brevity and a magnificent prose style, this book wins our quiet praise. It is a fine pamphlet, adding to the value of the series, and should not be missed"—*Spectator*. "A notable addition to this excellent series. His arguments are a provocation to fruitful thinking"—*Morning Post*

**The Dance of Giva, or Life's Unity and Rhythm** By COLIJUM

It has substance and thought in it. The author is very much alive and responsive to the movements of to-day which seek to unite the best thought of East and West, and discourses Mussolini and Jagadis Bose with perspicacity.—*Spectator*

**Lars Porsena, or the Future of Swearing and Improper Language** By ROBERT GRAVES *Second impression*

Goes uncommonly well, and deserves to"—*Observer*. Not for squeamish readers"—*Spectator*. No more amusingly unexpected contribution has been made to this series. A deliciously ironical affair"—*Bystander*. "His highly entertaining essay is as full as the current standard of printers and police will allow"—*New Statesman*. Humour and style are beyond criticism."—*Irish Statesman*

## TO-DAY AND TO-MORROW

**Socrates, or the Emancipation of Mankind** By H F CARLILL

' Devotes a specially lively section to the herd instinct"—*Times* "Emancipation" comes through knowledge The process making for this freedom is described with wit and sanity in *Socrates* —*Scotsman* "Deals with the trend of modern psychology in a way that grips the interest 'We trust it will gain a wide circulation"—*Clarion*

**Delphos, or the Future of International Language** By E SYLVIA PANKHURST

Equal to anything yet produced in this brilliant series Miss Pankhurst states very clearly what all thinking people must soon come to believe, that an international language would be one of the greatest assets of modern civilization"—*Speculator* A most readable book, full of enthusiasm, an important contribution to this thorny subject'

**Gallio, or the Tyranny of Science** By J W N SULLIVAN, author of "A History of Mathematics"

" So packed with ideas that it is not possible to give any adequate *resume* of its contents"—*Times Literary Supplement* ' His remarkable monograph, his devastating summary of materialism, his insight into the puerilities of many psycho-analysts This pocket *Novum Organum*"—*Speculator*

**Apollonius, or the Future of Psychical Research** By E N BENNETT, author of "Problems of Village Life," etc

' A sane, temperate and suggestive survey of a field of inquiry which is slowly but surely pushing to the front"—*Times Literary Supplement* ' His exposition of the case for psychic research is lucid and interesting"—*Scotsman* " Displays the right temper, admirably conceived, skilfully executed"—*Liverpool Post*

## TO-DAY AND TO-MORROW

**Aeolus, or the Future of the Flying Machine** By OLIVER STEWART

"Both his wit and his expertness save him from the nonsensical fantastic. There is nothing vague or sloppy in these imaginative forecasts"—*Daily News*. "He is to be congratulated. His book is small, but it is so delightfully funny that it is well worth the price, and there really are sensible ideas behind the jesting"—*Aeroplane*

**Stentor, or the Press of To-Day and To-Morrow** By DAVID OCKHAM

"This provocative volume, of which the chief point is the growing danger of newspaper combines"—*Liverpool Post*. "What pleases me most is his protests against 'bastard journalism'"—*Financial News*

**Rusticus, or the Future of the Countryside** By MARTIN S BRIGGS FRIBA

"Any attempt to stem the tide of ugliness which is sweeping over our countryside deserves our gratitude, and it is with especial pleasure that we hail the appearance of *Rusticus*, a brief but vigorous onslaught on our stupidity. Few of the fifty volumes [of this series] capture our imagination as does this one"—*Daily Telegraph*

**Janus, or the Conquest of War** By WILLIAM McDougall, M.B., F.R.S

Reviews all the chief causes of war and shows their roots to lie in the fear of aggression. Surveys all the more important suggestions for the avoidance of war, and shows them to be either impossible, useless, or dangerous. Finally recommends an international air force as the only remedy and answers all objections to it

TO-DAY AND TO-MORROW

*NEARLY READY*

**Vulcan**, or the Future of Labour By  
CECIL CHISHOLM

This stimulating book considers industry  
from the point of view of methods of efficiency  
and industrial organization

**Clio**, or the Future of History By  
ANDRÉ MAUROIS

A whimsical and fantastic picture of the  
world in the not-so-far distant future, showing  
the power of a world press organization

**Hymen**, or the Future of Marriage By  
NORMAN HAIRE

*IN PREPARATION*

**Caledonia**, or the Future of the Scots  
By G M THOMSON

**Lares et Penates**, or the Future of the  
Home By H J BIRNSTINGL

**Bacchus**, or the Future of Wine By  
P MORTON SHAND

**Mercurius**, or the World on Wings  
By C THOMPSON WALKER

**The Future of Chemistry** By T W  
JONES

**The Future of India** By T EARLE

**The Future of Films.** By ERNEST  
BETTS

